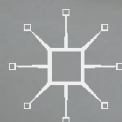


International Political Economy Series

The New International Division of Labour

Global Transformation and
Uneven Development

Edited by Greig Charnock and Guido Starosta



International Political Economy Series

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Greig Charnock • Guido Starosta
Editors

The New International Division of Labour

Global Transformation and Uneven Development

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Editors

Greig Charnock
Politics
The University of Manchester
United Kingdom

Guido Starosta
Economics and Administration
National University of Quilmes and
CONICET
Bernal, Buenos Aires, Argentina

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NOTES ON THE CONTRIBUTORS

Gastón Caligaris gained his PhD in Social Sciences from the University of Buenos Aires. He currently holds a postdoctoral research scholarship from the National Council of Scientific and Technical Research (CONICET), Argentina, and is based at the National University of Quilmes. He also teaches in the Social Science and Philosophy and Letters Faculties of the University of Buenos Aires. He is co-editor of *Economic and Political Relations: Contributions for the Study of their Unity based on the Work of Karl Marx* (2012, in Spanish), and has published various articles and book chapters in national and international academic presses.

Greig Charnock is Senior Lecturer in International Politics at The University of Manchester, where he teaches international political economy, the politics of globalisation, and Marxist critical theory. His most recent research has engaged the ‘open Marxism’ approach with critical theories of the production of space, and in analyses of crisis formation and management in Spain. He is co-author of *The Limits to Capital in Spain* (2014), and has published articles in such journals as *Antipode*, *Society and Space*, the *International Journal of Urban and Regional Research*, *Historical Materialism*, *New Political Economy*, and *South Atlantic Quarterly*. He is a member of the editorial board of the journal of the Conference of Socialist Economists, *Capital and Class*.

Alejandro Fitzsimons teaches Economic Sociology at the University of Buenos Aires. He is currently a post-doctoral scholar at the National University of Quilmes, with a research project on the evolution of the automotive and oil industries in Argentina between 1960 and 1990. His doctoral research studied the forms of valorisation of foreign capital in Argentina in the late 1950s and early 1960s. Other research interests include the dynamics of capital accumulation in Argentina after the crisis of 2001, and general topics of value theory. He is co-editor of

Economic and Political Relations: Contributions for the Study of their Unity based on the Work of Karl Marx (2012, in Spanish).

Tomás Friedenthal holds a PhD in Economics from the University of Buenos Aires, where he currently teaches Industrial Organisation in the Faculty of Economic Sciences. His research interests are in the fields of the political economy of development, monetary theory and method.

Nicolas Grinberg is a Research Fellow for Argentina's National Scientific and Technical Research Council (CONICET). He is based at the Institute for Advanced Social Studies of the National University of San Martín where he also teaches Development Economics. He holds a PhD in Economic History from the London School of Economics and Political Science. His research interests are in the political economy of development (with a regional focus in Latin America and East Asia). He has published his work in the *International Review of Applied Economics*, the *Journal of Contemporary Asia*, *New Political Economy*, and *Third World Quarterly*, amongst other outlets.

Sebastián Guevara is Professor in the Faculty of Social Sciences at the University of Buenos Aires, and a researcher for the National Council of Scientific and Technical Research (CONICET), Argentina. His research examines trade unions actions as a concrete expression of the accumulation of capital, in Argentina and the rest of Latin America. At the same time, he studies the automotive industry in Argentina and Brazil as particular expressions of the form in which capital accumulation has developed in the region. His principal publications to date are in the journals *Razón y Revolución*, *Revista E-L@tina*, *Studia Politicae*, and *Revista Política Hoje*.

Juan Ignacio Carrera is an independent researcher and director of the Centre for Science as Practical Criticism in Buenos Aires, Argentina, where he leads workshops on Marx's *Capital*. He also leads courses and research seminars on the critique of political economy, capital accumulation and its political forms in Argentina, and dialectical method at the University of Buenos Aires and the General Sarmiento National University. He is author of the books *Capital: Historical Reason, Revolutionary Subjectivity and Consciousness* (2013), *Child Labour and Capital* (2008), *Knowing Capital Today: Using 'Capital' Critically, Vol. I* (2007), *The Economic Formation of Argentine Society: 1882–2004* (2007), and *Dialectical Knowledge* (1992) (all in Spanish), and has published numerous articles and chapters in national and international books and journals.

Thomas F. Purcell is Senior Lecturer in Politics and International Relations at Leeds Beckett University, where he teaches courses in the area of Politics and Applied Global Ethics. Until recently, he was Sub-Director of the National Centre for Strategies for the Right to Territory (CENEDET) based at the Instituto de Altos Estudios Nacionales, Quito, Ecuador. Prior to this, he held research positions

at the Universitat Oberta de Catalunya, and at the Universities of Manchester and Nottingham. His research to date has examined the specificities of capitalist development in Ecuador and Venezuela, and also the political economy of Spain and the Eurozone crisis. He is co-author of *The Limits to Capital in Spain* (2014), and has published several book chapters and articles in journals such as *Geoforum*, *Historical Materialism*, the *International Journal of Urban and Regional Research*, *Latin American Perspectives*, and *Science and Society*.

Ramon Ribera-Fumaz is Senior Lecturer in the Department of Economics and Business and Director of the Urban Transformation Research Group at the Internet Interdisciplinary Institute, both at the Universitat Oberta de Catalunya. He has authored and co-authored numerous publications on the geographies of capitalism, urban transformation, technology, the knowledge economy, and culture; and in such journals as *Society and Space*, the *European Journal of Urban and Regional Studies*, the *International Journal of Urban and Regional Research*, and *Progress in Human Geography*. He is co-author of *The Limits to Capital in Spain* (2014).

Guido Starosta is Professor in the History of Economic Thought at the National University of Quilmes and member of the National Council of Scientific and Technical Research (CONICET), Argentina. He has previously held teaching and research positions at the Universities of Manchester and Warwick. His research interests are in the political economy of development (with a regional focus on Latin America), and his work has appeared in *Antipode*, *New Political Economy*, and *Third World Quarterly*. He is currently investigating economic and political forms of the accumulation of capital in Argentina under 'Kirchnerism'. He also works on issues of method and subjectivity in the Marxian critique of political economy. He is author of *Marx's Capital, Method and Revolutionary Subjectivity* (2016) and co-editor of *In Marx's Laboratory* (2013). Other publications from this strand of research have appeared in *Capital and Class*, *Historical Materialism*, and *Science and Society*.

LIST OF ABBREVIATIONS

AIFTA	Anglo-Irish Free Trade Agreement
ALBA-TCP	Bolivarian Alliance for the Peoples of our America-Trade Agreement of the Peoples
ARS	<i>peso</i> (national currency of Argentina)
BNDE	Brazilian Development Bank
BsF	<i>bolívar fuerte</i> (national currency of Venezuela)
CADIVI	Comisión de Administración de Divisas (Venezuela)
CET	Common External Tariff
CIDL	Classical international division of labour
CICP	Centre for Research as Practical Criticism
CPI	Consumer price index
CSN	Companhia Siderúrgica Nacional
CST	Tubarão Steel Company
DEC	Digital Equipment Corporation
EC	European Communities
EEC	European Economic Community
EMU	European Monetary Union
EOI	Export-oriented industrialisation
EU	European Union
FASA	Fabricación de Automóviles SA
FDI	Foreign direct investment
FTAA	Free Trade Area of the Americas
GATT	General Agreement on Tariffs and Trade
GDP	Gross domestic product
IBEX	Spanish stock market
INI	Instituto Nacional de Industria (Spain)
IPE	International political economy

ISI	Import substitution industrialisation
ISV	Independent software vendor
IT	Information technology
Mercosur	Common market of the Southern Cone
NAFTA	North American Free Trade Agreement
NDP II	Second National Development Plan, 1975–79 (Brazil)
NIDL	New international division of labour
OECD	Organisation for Economic Cooperation and Development
OEM	Original equipment manufacturing
OPEC	Organisation of Petroleum Exporting Countries
PC	Personal computer
PDVSA	Petróleos de Venezuela
POSCO	Pohang Iron and Steel Company
PPP	Purchasing power parity
R&D	Research and development
SEAT	Sociedad Española de Automóviles de Turismo
SOEs	State-owned enterprises
TNC	Transnational corporation
UK	United Kingdom
USA	United States of America
USD	United States dollar
U-W	Unix-Workstation
WWI	First World War
WWII	Second World War

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Introduction: The New International Division of Labour and the Critique of Political Economy Today

Greig Charnock and Guido Starosta

Thus, from the bare enumeration of some of the more glaringly obvious features of the present-day world economy, it can be seen that the old or ‘classical’ international division of labour, by which the underdeveloped countries were on the whole incorporated into the capitalist world economy as mere raw materials suppliers, no longer exists. The underdeveloped countries are increasingly chosen as sites for manufacturing industries producing goods that are competitive in the world market.

... This tendency will be designated the ‘*new international division of labor*’ (to be considered as an on-going, not a completed, process) (Fröbel et al. 1978: 845, 849).

In a recent anthology of his essays on *Global Capitalism* (2015) Hugo Radice recounts how in the 1960s and early 1970s progressive, broadly Marxist, scholarship fell short of providing a satisfactory means of understanding what was by then a rapidly changing world. The debates

G. Charnock (✉)

Politics, The University of Manchester, Manchester, UK

G. Starosta

Department of Economics and Administration, National University of Quilmes and National Scientific and Technical Research Council, Buenos Aires, Argentina

back then, he summarises, ‘had little to say directly about the transformations of production and work within firms, or about the political relations between organised economic interests and the state, while international economic relations between states were understood firmly in nineteenth century terms of autonomous and mutually antagonistic powers, great or small’ (Radice 2015: 9). Yet profound and lightning-paced transformations in worldwide production and trade were indeed palpable to any observer back then, and by the mid-1970s Marxist scholars in the UK and beyond were beginning to engage in highly productive—and still influential—debates on the labour process, state theory, and alternative political strategies in the context of deep world recession and heightened social and political tensions across much of the West. Radice recalls, in particular, his participation in a 1974 workshop in Starnberg, Germany, ‘at which Otto Kreye and his colleagues presented the first results of their project on the new international division of labour’. This work, he confirms, was to become ‘very influential for progressive scholarship on global capitalism’ (Radice 2015: 9).

The new international division of labour (NIDL) thesis developed by Folker Fröbel, Jurgen Heinrichs, and Otto Kreye very much stands out as one of the most influential and widely debated contributions at the forefront of discussions on late-industrialisation and global production long into the 1980s and 1990s. Based on their empirical studies in the 1970s, Fröbel, Heinrichs, and Kreye’s work seemed to capture extremely well the transformations in the world market taking place by the beginning of that decade, and very rapidly caught the attention of most analysts of international political economy (IPE) and the changing geographies of global capitalism. Although the argument in their book *The New International Division of Labour* (published in English in 1980) rested on very distinctive theoretical foundations and arguments, reviewed below, the expression ‘new international division of labour’ was to somehow acquire a life of its own and soon became very much a part of the working vocabulary of most scholars empirically concerned with global processes of industrial restructuring—a kind of conceptual shorthand to encapsulate what were regarded as the main developments in the world economy at that time. The ‘NIDL’ thus became a catchphrase, widely accepted and loosely used (sometimes by default) to *describe* the novel configuration of the capitalist world market, but without always making a self-conscious effort to acknowledge or flesh out the particular conceptual approach

being deployed to *explain* this empirical phenomenon and its subsequent developments.

In a nutshell, the popularised version of the NIDL thesis consisted of the following stylised account of the process of global restructuring. Faced with declining profitability in advanced capitalist countries (mainly due to rising wages), transnational corporations (TNCs) started to relocate labour-intensive manufacturing to the then, so-called, Third World, thus acting as a major factor in the industrial decline that seemed to prevail in the former countries in the late 1970s and early 1980s. 'Third World' countries, for their part, provided TNCs with a huge potential reserve of low-paid and disciplined workers. Combined with technological advances in the means of communication and transport, the increasing fragmentation of production processes and the consequent simplification of semi-skilled and unskilled tasks created a tendency for the establishment of export-oriented 'world market factories' in the 'Third World'. Accordingly, the story went on, the classical international division of labour (CIDL)—revolving around the polarisation of the world economy into an industrialised 'core' and a dependent 'periphery' confined to the role of supplier of raw materials and staple foods—had been superseded by the NIDL, with an industrialised but still dependent Third World, and a 'First World' oriented to a service-based economy, which could not absorb the resulting unemployed population.

The NIDL thesis remained highly influential into the 1990s but—if the scant number of studies published in the last decade dealing directly with the NIDL is any indication—the thesis has since become *passé*. Undoubtedly, this can be explained in part by changing fads and the development of new lines of inquiry and debate among academics. Yet it is also the case that some scholars had started to put forward strong reservations against the NIDL approach by the 1990s—prompted principally by some empirical developments which seemed to contradict the major claims of the NIDL thesis. The 'impressive' developmental record of the first generation of Asian Tigers (especially South Korea), in particular, seemed to undermine a theory that put export-oriented industrialisation based on extremely low wages in labour-intensive industries at the heart of its argument. More broadly, as many critics have rightly highlighted, the initial formulations of the NIDL thesis contained untenable sweeping generalisations, which could not account for national differences in the developmental path of many countries. The industrial upgrading of the first generation of Asian Tigers, for example, would eventually include

relatively complex, capital-intensive sectors rather than simply unskilled-labour-intensive ones, as the stylised version of the NIDL that became common currency appeared to suggest.

While accepting the veracity of some of the criticisms levelled at the original NIDL thesis and the version of it that became common currency by the 1990s, we believe that it now deserves to be revisited. We propose that a *properly reconsidered and revised* NIDL thesis can still shed light on the specificities of capitalist development in various parts of the world today, as well as the nature of uneven development across the capitalist world market. Taken together, the contributions to this book represent the basis for such a reconsideration of the NIDL thesis which rests upon the Marxian distinction between the global economic *content* that *determines* the constitution and dynamics of the international division of labour, and the evolving national political *forms* that *mediate* its development. More specifically, the book argues that national developmental processes across the world have been but *an expression of the underlying essential unity of the production of relative surplus-value on a world scale*. The fact that the approach taken in this book is rooted in the critique of political economy originally developed by Karl Marx over 150 years ago does not detract from its contemporary significance. Moreover, a revised NIDL thesis as put forward in this volume represents an original contribution to key debates in international and critical political economy, insofar as, firstly, its theoretical foundations lie in research that moves to some extent beyond Marx; and, secondly, it departs in significant ways from not only Fröbel and his colleagues, but also a variety of contemporary approaches that seek to understand the nature of—and the relation between—global transformation and uneven development.

FROM THE CRITIQUE OF POLITICAL ECONOMY TO A *NEW* NEW INTERNATIONAL DIVISION OF LABOUR THESIS

The book draws its inspiration from innovative theoretical scholarship that has emerged under the auspices of the Centre for Research as Practical Criticism (CICP), based in Buenos Aires, Argentina, and especially the work of the independent scholar Juan Iñigo Carrera. This work, which is only just recently beginning to appear in Anglophone literature—in part, because it has been developed outside of formal academic structures and networks¹—represents a thorough re-examination of Marx's critique of political economy and its dialectical-methodical foundations. While draw-

ing upon Marx's fundamental insight into the determination of capital as the immediate subject of the organisation of the process of social life, it also moves some way beyond it so as to cast fresh light on global transformation and uneven development in recent decades, as well as to offer ground-breaking research on the emancipatory subjectivity of the working class (a theme we do not broach directly in this book but see, for example, Starosta 2016). The following section outlines the basic contours of the approach pioneered by Iñigo Carrera.

*Capital, the System of Machinery and the International
Fragmentation of the Productive Subjectivity of the Global
Working Class*

As Starosta explains in Chap. 4, one of the most potent scientific discoveries of Marx's critique of political economy was that capital is neither simply a thing (for example, the instruments of production), nor a productive unit or legal entity (such as a firm), nor a social grouping sharing common characteristics and interests (for instance, business or the bourgeoisie). In its general determination as self-valorising value, capital is actually a materialised social relation between commodity owners differentiated into social classes, which, in its fully developed form as the total social capital, becomes inverted into the (alienated) subject of the unity of the process of social reproduction and its expansion (Marx 1976: 763). Thus, *capital* is essentially the movement of the self-expansion of the objectified general social relation between private and independent human beings which, in its own process, produces and reproduces the latter as members of antagonistic social classes (Marx 1976: 723–4; Marx 1992: 185). All moments of the human life-process thus become inverted into material bearers of the life-cycle of capital, or they become forms assumed by the flow of value in its circulatory process. Subsumed under the capital-form, the alienated content of social life becomes the production of surplus-value or the formally boundless quantitative progression of the general reified form of social mediation (Marx 1976: 251–7).

Although this content governs the movement of capital as a whole or as an alienated collective power, the *total (global) social capital* is nonetheless the product of the private and independent form taken by social labour. The general unity of the movement of the total social capital cannot be established immediately. It is thereby indirectly established through the exchange of commodities resulting from the apparently autonomous

actions of individual capitals in competition with each other, as each of them pursues the maximisation of its profitability through the expanded reproduction of their formally independent cycles of valorisation. In their simplest form, those cycles can be represented through the well-known general formula of capital:

$$\begin{array}{c} \text{LP} \\ \hline M - C \qquad \dots P \dots C - M + \Delta M \\ \text{MP} \\ \hline \end{array}$$

Where M =money capital, C =commodity capital, P =productive capital, LP =labour power, MP =means of production. More specifically, the concrete form in which individual capitals assert their class unity as ‘aliquot parts’ of the total social capital is the process of formation of the general rate of profit (Marx 1981: 298–300, 312). This is the inner or essential determination of the general social relation between capitalist firms (or individual capitals).

The territorial or spatial dimension of the accumulation process—and the changing forms of the worldwide division of labour—therefore cannot be seen as being *determined* by the conscious locational ‘strategies’ of TNCs faced with given qualitative national and regional differences, in turn seen as established by allegedly autonomous state policies. Instead, it needs to be grasped as an expression of the underlying formal and material unity of the essentially global contradictory dynamics of the accumulation of the total social capital through the production of relative surplus-value, which are *economically mediated* by relations of competition among individual capitals like TNCs (again, as opposed to *determined*), on the one hand, and *politically mediated* by the policies of the nation state on the other. These contradictory and crisis-ridden dynamics, which, in their most developed form as large-scale industry, fundamentally *entail the permanent revolution in the modes of exertion of the labour power of individual workers and of their articulation as a directly collective productive body or organism* (Marx 1976: 617), lie at the heart of the changing historical forms of the international division of labour.

The production of relative surplus-value in the form of large-scale industry entails four divergent tendencies in the development of the productive attributes of the global working class (Iñigo Carrera 2013: Chap. 2). First, it expands the productive subjectivity of the part of the collective

labourer responsible for the advance in the conscious control of the movement of natural forces (that is, science) and its technological applications in the directly social organisation of the immediate production process.² Although not explicitly addressed by Marx in *Capital*, the benefit of historical hindsight makes it very easy for us to recognise how the total social capital deals with its constant need for the development of the productive powers of science and for the conscious organisation of the increasingly social labour process, namely, by engendering a special partial organ of the collective labourer (see Starosta 2016: Chap. 8). Capital requires from these workers ever more *complex* forms of labour. As much as those discussed in *Capital*, these are also ‘immediate effects of machine production on the worker’ (Marx 1976: 517). Needless to say, inasmuch as this expanded productive subjectivity is nothing more than a concrete form of the production of relative surplus-value, the exercise of newly developed intellectual productive powers is also inverted into a mode of existence of capital in its movement of self-valorisation. Moreover, sooner or later many of these intellectual dimensions of living labour will also experience automation (or knowledge codification) and therefore become relatively simplified. As we shall see later in this book, this latter aspect has been central to the more recent phases in the evolution of the NIDL (as shown in Chap. 6 through a discussion of the Irish software industry).

Second, it tends to degrade the subjectivity of those workers that acquire and exercise their increasingly simpler manual or experienced-based productive attributes in the direct process of production. Indeed, large-scale industry is based on the objectification of *tacit* knowledge, previously embodied in the manual industrial worker and largely acquired through lengthy on-the-job, learning-by-doing processes, as an attribute of the system of machinery (Huws 2006). In this sense, the impact of capitalist automation certainly tends to be one of ‘deskilling’ or degradation of direct production work through the objectification of formerly manual tasks as functions of machines. Yet the effect of increasing automation has not just been one of deskilling. It has been mixed, also entailing a certain creation of new skills required by capital even from direct production workers. The key point, however, is that these newer skills have been of a different *kind* from those that have been eroded. While the older skills tended to be based on the *particularistic* development of the productive subjectivity of wage-workers (both manual and intellectual) as a result of the practical experience of machining in the direct process of production, the newly created skills tend to revolve around the *universalistic* dimension

of the productive quality of labour-power, whose development is achieved in the general process of education and socialisation that precedes its actual application in the production process. For instance, and crucially for the general argument developed in the book, the ‘microelectronic revolution’ that is at the basis of the NIDL has entailed not only the degradation of the particularistic dimension of direct production work but also the emergence and generalisation of, so-called, soft or generic skills (see Ramioul 2006), such as familiarity with computers and flexibility or individual initiative in problem-solving or decision-making (Balconi 2002).

In the third place, while the new technologies have not resulted in the total elimination of manual labour from automated processes of production (Alcorta 1999: 164), they have recreated the conditions for the extended reproduction of what Marx called the ‘modern manufacturing division of labour’, that is those non-mechanised tasks and labour processes acting as an ‘external department’ of large-scale industry proper as the dominant form (Marx 1976: 588ff). This tendency has been fundamental for initial stages of the NIDL, which are the ones that Fröbel and his colleagues accurately but one-sidedly captured in the 1970s.

Fourth and last, the production of relative surplus-value through the system of machinery leads to the multiplication of the surplus population relative to the needs of the accumulation process, which also constitutes a transformation of productive subjectivity produced by the automation of large-scale industry (see Marx 1976: 553–75). More specifically, this tendency represents the most extreme case of material mutilation of the productive attributes of the working class resulting from capital accumulation, that is, not simply their degradation but their outright non-reproduction. Yet, it is from this tendency that the global pool of cheap but disciplined labour power, which has been central for the original constitution and evolution of the NIDL, has eventually derived.

What all the contributions to this book share is a conviction that the foundation of the uneven spatial differentiation of global capitalism must be searched for in these changing forms of the exploitation of the global working class by the total social capital, through the transformation of the material forms of the capitalist production process. The latter is, in our view, the *general content* that is realised in the political form of state policies (domestic and foreign) and class conflict, albeit behind the backs of the antagonistic actions of the personifications involved (social classes and their diverse political organisations, capitalist firms, ‘political elites’ and/or ‘state managers’). Taking their cue from Inigo Carrera’s original approach, all the

authors in this book see the transformations associated with NIDL as being products of the total social capital's drive to enhance the production of relative surplus-value on a world scale through the development of labour productivity, which finds its most advanced expression in the mechanisation of large-scale industry. Succinctly put, Iñigo Carrera's fundamental argument is that the 'essential' general content that defines the NIDL, and which has been reproduced under its evolving historical configurations since the 1950s until the present time, consists in the *international fragmentation of the productive subjectivity of the working class* (Iñigo Carrera 2013). Thus, as a result of its own immanent tendencies, the simplest original form of the NIDL—which we think Fröbel and his colleagues were right to identify as signifying an on-going process—has evolved into a more complex constellation, whereby capital searches worldwide for the most profitable combinations of relative cost and qualities/disciplines resulting from the variegated past histories of the different national fragments of the working class (through their impact upon their general conditions of reproduction and condensed in the so-called 'historical component' of the value of labour-power). Each country therefore *tends* to concentrate a certain type of labour-power of distinctive 'material and moral' productive attributes of a determinate complexity, which are spatially dispersed but collectively exploited by capital as a whole in the least costly possible manner (Grinberg 2011: 35–6). Production in specific industrial sectors has thereby expanded in some countries while contracting in others where new and more advanced sectors have developed, following a rhythm determined by the evolution of two main factors, that is, technological change and relative cost and productive attributes of national labour forces.

This different constellation *does not* involve the transcendence of the NIDL, as many of the critics of the original thesis have suggested (see Chap. 4), but instead represents a more complex form assumed by the same general content. This was the content that the original formulation of the NIDL thesis by Fröbel, Heinrichs, and Kreye failed to uncover, influenced as those authors were by dependency and world-systems theories, and the view that different countries and regions of the world achieve different levels of development on the structural basis of 'unequal exchange'. And it is this content that has generally eluded alternative international and critical political economy approaches that seek in their own way to explain the specificity of national development and the relations between distinct national 'capitalisms' under conditions of 'globalisation' or of 'combined and uneven development'.

*The Significance of This Approach for a Distinctive
Understanding of Global Transformation and Uneven
Development*

We think that, whatever its shortcomings, the early debate over the NIDL in the 1980s (in particular, the contribution by Fröbel, Heinrichs, and Kreye) was indeed on the right track as regards grasping the specific nature of the recent transformations of the process of capital accumulation on a world scale. Thus, it actually provides richer material and a more fruitful starting point for a critical investigation of the determinations underlying the, so-called, globalisation process than many other contemporary international and critical political economy analyses. In this sense, we feel that the question of the NIDL should be put back on the agenda for a robust theorisation of global transformation and uneven development. There is no doubt, as conceded above, that the original debates around the NIDL left many theoretical and empirical questions unresolved. In particular, no contribution managed properly to account for the process of national differentiation as an expression of the underlying essential unity of the accumulation of capital on a world scale. The debate, in short, never resolved the tension between national and global dimensions in the articulation of the international division of labour. The significance of this book, then, is that taken together the contributing authors provide a basis for an alternative critique and reformulation of the NIDL thesis that, first, recovers what constituted its main achievement and which has been forgotten by contemporary theorising; namely, the understanding of national differentiation as an expression of the essential unity of the capitalist world system. Second, and by drawing on a particular reading of the Marxian critique of political economy grounded in the work of Iñigo Carrera, we believe the book provides a more distinctive foundation for the conceptualisation of that unity than can be found in Fröbel et al.'s *marxisant* world-systems theory. Let us elaborate.

Drawing directly upon the work of 'monopoly capital', 'world-systems' and 'dependency' theorists, Fröbel and his colleagues conceptualised the 'unequal development' they believed to be central to world capitalism in descriptive terms of: 'The splitting up of the capitalist social formation into "centre" and "periphery"', and also possibly "semi-periphery", both intra- and inter-nationally, that is, the development of an international division of labour with different forms of control over labour for different types of production in different regions of the capitalist world economy'

(Fröbel et al. 1980: 32). In our view, attempts by world-system theorists to explain unequal development proceeded from a problematic theoretical-conceptual distinction between core and periphery. They sought to derive underlying, structural relations between different countries and regions on the basis of empirical evidence which suggested that capital-intensive production was concentrated in the core, that labour-intensive production was concentrated in the periphery, and that the international exchange relations between the core and periphery ensure the continuous development of the former at the expense of the latter.³ Alongside, or overlaying, these international economic relations, they posited unequal political relations between countries engaged in competitive measures to promote or protect their own industries to the detriment of other countries' industries. At the root of this dualistic conceptualisation of unequal economic and political international relations is an analytical distinction between economics and politics that Radice (2009: 36) rightly, in our view, problematises for its confinement of 'class struggle to the realm of "politics"', not realising that the existence of a separate realm of politics is in itself a condition of existence of capitalism'. Furthermore, this conceptualisation assumes that the 'central structural feature of "the economy" is the division of labour *in society*'—whether in national or international form—'rather than in manufacture, to use Marx's careful distinction' (Radice 2009: 34). In other words, it is *capital*—understood as an essentially global process—and not the external and contingent political and exchange relations established between a multiplicity of national states themselves, that *determines* their development. And it is capital's thirst to enhance the production of relative surplus-value, on the basis of the development of large-scale manufacturing and the fragmentation of the international working class, which is at stake in the historical development of the international division of labour, not the reproduction of relations of unequal exchange between domestic and international classes that are somehow socially and politically constituted outside of the global process of accumulation (see Chap. 2).

In any case, the fate of the NIDL thesis was not decided by critical theoretical engagement over the dubious assumptions of world-systems and dependency theories. Indeed, the demise of the NIDL thesis during the 1990s went hand-in-hand with a discernible move away from the consideration of *any* question of the structural unity of the global accumulation of capital by IPE and cognate literatures, and instead turned towards a widespread focus on national state institutions as autonomous drivers of economic development. Not least under the influence

of neo-classical economists (such as Krueger 1990; Ranis 1989; Stiglitz 1996; World Bank 1993) and statist international political economists (notably, Amsden 1989; Evans 1995; Rodrik 1994; Wade 1990; Weiss 1998) who dominated debates on the efficacy and resilience of market-led co-ordination versus *dirigiste*, or state-led, development in the context of ‘economic globalisation’ (see Grinberg 2013: 173–8). As this debate ran out of steam in the late 1990s, scholars working in development studies and economic geography then embarked upon richly detailed research into global commodity chains, as a means of examining the impact of globalisation upon industrialisation in the developing world. While the foundational texts in this new paradigm were actually intellectually rooted in the lineage of monopoly capital and world-systems theory, the bulk of the emergent literature then arguably became highly descriptive and/or tended to focus on conceptualising industrial or business organisation on a ‘network’ basis (that is, based on the pure contingency of immediate direct social relations) and to the complete eschewal of the question of the constitution of ‘commodity chains’ and, later, ‘value chains’ and the dynamics of the global system as a whole (Starosta 2010). Meanwhile, in the IPE literature of the 1990s the question of explaining capitalist diversity became dominated by ‘new institutionalist’ approaches—not least the ‘varieties of capitalism’ approach pioneered by Hall and Soskice (2001)—which further compounded the tendency to focus upon the apparently autonomous constitution of individual capitalist states’ institutional forms, at the expense of the consideration of what makes them ‘capitalist’ in the first place and the ‘constitutive elements they hold in common’ (Coates 2014: 21).

To be fair, a new generation of critical IPE and international relations scholars in recent years has at least sought to rectify the lack of a substantive theorisation of global transformation and uneven development in dominant debates, couched in questions of ‘capitalist diversity’ (Bruff and Ebenau 2014) or of ‘uneven and combined development’ (see Allinson and Anievas 2009). For us, however, these contributions have yet to offer a convincing, substantive basis for a ‘unified field theory’ of uneven development and the ever-changing geographies of capitalism—a necessity famously identified by David Harvey (2005: 58–9; see also Rioux 2015: 508; Smith 1989). Insofar as they do represent a welcome return to older, sidelined debates and canonical Marxist and *marxisant* literature, and an even more welcome exposé of the ideological nature of mainstream approaches, these new contributions ultimately run the risk of reproducing

in new guises the problems we argue were already inherent in the classic literature: principally, in terms of explaining the concrete forms of ‘variegated national capitalisms’ and uneven development through the strategic and conscious action of key agents and ‘social forces’ that are somehow constituted outside of the process of capital accumulation; or in terms of resorting to the theory of ‘unequal exchange’ to explain ‘underdevelopment’; or in terms of failing to *explain* the social determination of ‘uneven and combined development’, other than by means of a prior reliance upon the primacy of this under-theorised, abstract and trans-historical category.⁴

We suggest that the approach taken in this book can indeed provide such a unified field theory. By deciphering the national forms taken by the general content of an historically specific mode of the reproduction of total (worldwide) society, on the basis of the fragmentation of the productive subjectivity of the international working class, and through the development of the automation of large-scale industry within the NIDL, this book advances a substantive explanation of the inner relation between global transformation and uneven development that may well provoke criticism and debate, but which at least does so on distinctive and hitherto largely unfamiliar grounds.

OUTLINE OF THE BOOK

The argument in Part I of this book—containing chapters by Iñigo Carerra, Caligaris and Starosta—sustains that Fröbel, Heinrichs, and Kreye were right to proceed from a global perspective on capital accumulation, and also right in the centrality they attributed to the recent material transformations of the capitalist labour process as key to the explanation of the developmental potentialities of late-industrialisation. On the basis of this critical re-examination of the NIDL thesis, the book goes on to argue that a revised NIDL thesis can shed new light on the specificities of capital accumulation in various parts of the contemporary world. Two particularly significant general insights emerge from these early chapters. First, that both the classical and new international divisions of labour should be most fruitfully re-signified in terms of the role played by *ground-rent* in specific national spaces of accumulation (a category explained in Part I). And second, that there remain essential continuities inherent to the classical international division of labour which necessitate that the current constellation of the world economy be understood as being constituted by the co-existence of both old and new international divisions of labour.

Such insights carry with them important and hitherto unacknowledged implications for the study of international political economy, and conclusions that contrast sharply with dominant critical and orthodox theories of global capitalism and uneven development.

The remainder of the book incorporates case study material on four countries in Latin America, two European countries, and one Southeast Asian country. The choice of national case studies in Part II is by no means arbitrary.⁵ Each of the countries the respective authors examine is, in their own way, paradigmatic and emblematic of the essential dynamics of the NIDL that we are seeking to draw out theoretically and concretely in this book. Argentina and Brazil, for example, are the most visible examples of countries in which the structural characteristics of the CIDL persist and complement those of the NIDL to this day (certainly since the recent commodity export boom, and the revival of import substitution industrialisation under the Kirchners in Argentina). Ecuador and Venezuela represent the starkest examples of what Thomas Purcell in his chapter terms 'landlord states' within the contemporary international division of labour. And, notwithstanding their 'advanced' country status, Ireland and Spain continue to occupy a position within the NIDL on the basis of the differentiated and relativised development of the productive subjectivity of their working class, and therefore allow us to cast fresh light on the dynamics of development, capital accumulation, and crisis outside of the 'late industrialising' states of Latin America and Southeast Asia. Finally, South Korea stands out as the country which, in the past, has been used to undermine the original NIDL thesis since its 'take-off' is often said to be the exception that disproves the rule of that thesis (as formulated by Fröbel, Heinrichs, and Kreye, of course).

The book begins with a chapter originally published in Spanish, which introduces Juan Iñigo Carrera's take on the NIDL. In it, Iñigo Carrera proceeds from a particular point of departure, that is, from the *global process* of accumulation in its organic unity, and within which distinct national processes of accumulation emerge as specific concrete forms of that same global process. He argues that there is an objective determination relating to the formation of a general rate of profit as the regulator of the unity of the process of capital accumulation, and which engenders a qualitative difference between those capitals that are able to contribute to that formation and those which cannot—resulting therefore in differentiated concrete rates of profit. The latter sections of the chapter integrate these two arguments so as to present an innovative, critical, methodological basis for

the re-examination of the CIDL and NIDL—one that sharply contrasts with dominant interpretations.⁶

In Chap. 3, Gastón Caligaris provides fresh insight into the old, or classical, international division of labour and into the development of capitalism in resource-rich countries whose longstanding historical role in the world market has been to produce ground-rent-bearing commodities. The chapter builds, again, upon the notion of capital accumulation as being global in content and national in form. From this perspective Caligaris challenges a dominant perspective that explains the functioning of a national economy as the result of domestic politics, and another that explains it as a consequence of foreign influence and domination. He instead presents an original approach that explains the specific characteristics of the national process of accumulation in countries specialised in the production of ground-rent-bearing commodities, and in doing so substantiates the argument that ground-rent is essentially constituted by the surplus-value resulting from the valorisation of industrial capitals abroad and which flows into ‘resource rich’, raw materials-producing countries. The chapter therefore further advances the critique of those approaches that attempt to explain such characteristics through theories and analyses of unequal exchange with advanced capitalist countries. The latter sections of the chapter use empirical evidence from the example of capitalist development in Argentina during the twentieth century to illustrate the core argument.

In Chap. 4, Guido Starosta turns his attention to the task of the critical reconstruction of the NIDL thesis. While acknowledging the insights of the original thesis, Starosta argues that the foundation for the emergence of the NIDL does not reside in the intensification of the manufacturing division of labour, that is, in the deskilling resulting from the subdivision of the production process into elements. Instead, the NIDL developed as an expression of the impact that the progress of the automation of capitalist large-scale industry has had on the individual and collective productive subjectivity of the working class. More specifically, the constitution of the NIDL has been the result of the transformation of the modes of existence of the global collective labourer, brought about by the leap forward in the process of computerisation and robotisation of the production processes of large-scale industry, especially since the ‘microelectronics revolution’. As a result of its own immanent tendencies, the simplest original form of the NIDL has evolved into a more complex constellation, whereby capital searches worldwide for the most profitable combinations of relative cost

and qualities/disciplines resulting from the variegated past histories of the different national fragments of the working class. Each national sphere of accumulation therefore tends to concentrate a certain type of labour-power of distinctive material and moral productive attributes of a determinate complexity, which are spatially dispersed but collectively exploited by capital as a whole in the least costly possible manner. Production in specific industrial sectors has thereby expanded in some countries, while contracting in others where new and more advanced sectors developed, following a rhythm determined by the evolution of those two main factors—i.e. technological change and the relative cost and productive attributes of national labour forces. An important claim made by this chapter, therefore, and which subsequently has relevance for Chaps. 5 and 9, concerns the degree to which structural characteristics of the CIDL and the NIDL today co-exist in national spaces of accumulation—particularly in Latin America. This, the chapter concludes, actually confirms the validity of a reworked NIDL thesis rather than its unequivocal refutation.

Part II turns to national case studies of capitalist development within the international division of labour. In Chap. 5, Thomas Purcell scrutinises the experiences of two countries whose national governments have been said to be representative of ‘post-neoliberalism’, Ecuador and Venezuela. Taking his cue from Part I, Purcell argues that the CIDL was never simply reducible to the polarisation of an industrialised core and a dependent periphery, with the latter restricted to the role of supplier of raw materials and staple foods. Rather, there was an important process of accumulation in the periphery, whereby national industrial capital was able to valorise through the appropriation of inflows of ground-rent; a process which today also points towards the continuation of elements of the classic within the new IDL. The global rise in primary commodity prices in recent years has put the question of the use of income from natural resources for developmental goals back on the political agenda across Latin America. Drawing upon Iñigo Carrera (2007), Purcell examines the distinction between agricultural and mining landownership in the context of global transformation associated with the international division of labour, so as to explain the developmental trajectories of Ecuador and Venezuela. He argues that dual landlordism in Ecuador—in the form of an agro-export elite and a state-controlled oil sector—contrasts with the singular dominance of the state-controlled oil sector in Venezuela, and this, for Purcell, explains the manner in which the two national forms of

insertion into the international division of labour have determined different national variants of post-neoliberalism.

Chapter 6 examines Ireland's rapid structural economic transformation during the 1990s, and the debates that emerged about the potentialities and limits of this idiosyncratic 'developmental model', and its apparently successful integration into the global economy. Whilst neo-liberal economists have tended to explain the Irish experience of rapid growth in terms of the adoption of a liberalisation and export-led strategy that opened the economy to vast inflows of 'high-tech' FDI (foreign direct investment), critical commentators have argued that such an account ignores the active role actually played by the Irish state and related institutions and organisations in shaping the precise mode in which the 'local' economy integrated into 'globalised networks' of high-tech production and innovation. According to this alternative view, the Irish case is actually that of a Network Developmental State that manages the connection between the local and the global and, through its active involvement in industrial development, steers the national economy along a path of integration into the technologically most dynamic elements of the world economy. In contrast to the authoritarian state developmentalism of the East Asian Tigers, and their (initial) reliance on the 'super-exploitation' of cheap manual labour, the Celtic Tiger model would be predicated on democratic institutions and more qualified, higher-wage jobs in cutting-edge sectors of the economy. Tomás Friedenthal and Guido Starosta take issue with these apparently opposed explanations insofar as they both explain the trajectory of the Irish developmental process on the basis of the successful implementation of 'correct' nation-state policies (even if they disagree on the precise nature of those policies). By contrast, this chapter argues that the Irish experience is yet another concrete expression of the further development of the essentially *global* dynamics of the NIDL. More specifically, it argues that the continuous skill-replacing technical change characterising the production of relative surplus-value across the globe has allowed capital to integrate national working classes with more skilled, but still relatively cheaper, labour-power into the NIDL. The peculiar state policies and institutions prevailing in Ireland are therefore grounded in this specific form of integration into the NIDL.

In Chap. 7, Greig Charnock, Thomas Purcell, and Ramon Ribera-Fumaz focus on the case of Spain in support of Iñigo Carrera's argument that, as a result of the general crisis of overproduction, the marked differentiation in the conditions of reproduction and exploitation of the working

class *within* national borders since the 1970s has unfolded through a form of differentiated integration in Europe. Charnock, Purcell, and Ribera-Fumaz argue that it is crucially important to understand the longer-term historical role played within the NIDL by relatively late-industrialising countries that are today bearing the brunt of crisis and internal devaluation in a ‘unified’ Europe. Focusing on Spain, they argue that it is precisely on the material basis of its full integration within the NIDL from the mid-1970s that the conditions of the reproduction of the working class were reshaped, and it is this historical component in the reproduction of the Spanish accumulation process that has prefigured the process of the differentiation of the conditions of the reproduction of the working class across *and* within its borders ever since.

In Part III, we turn to specific sectoral case studies within the NIDL. The choice of case studies is again not arbitrary, since the automotive and steel production sectors have been at the historical vanguard of the move towards the NIDL, and they have been industries in which the actual determinants of the NIDL, which the book seeks to identify, have been most visible. In Chap. 8, Alejandro Fitzsimons and Sebastián Guevara examine the historical development of the Argentine automotive industry from the mid-1950s to the present. They argue first that the peculiar characteristics of low scales of production, obsolete technology, and the resulting low global competitiveness of the local auto industry in its initial stages were determined by the specific form of capital accumulation prevailing in Argentina as a result of its participation in the CIDL. This specificity had at its core the process of appropriation by industrial capital of a portion of the relatively abundant ground-rent available in Argentina; in this case, by transnational automotive manufacturers. Challenging the dominant point of view that the development of the NIDL led to the qualitative restructuring of the Argentinean automotive industry, this chapter examines concrete changes within the labour process and forms of valorisation of capital in the industry. In so doing the chapter argues that, despite these changes, the automotive industry in fact continued its development on the same basis as before—i.e. the appropriation by TNCs of a portion of agrarian ground-rent. Fitzsimons and Guevara conclude, therefore, that the NIDL did not ‘restructure’ the Argentine automotive industry—as is commonly claimed.

In Chap. 9, Nicolas Grinberg offers an alternative account to the mainstream, institutionalist view on the state-led process of economic

development in Brazil and South Korea. Focusing on the development of the Brazilian and Korean steel industries, Grinberg claims that the specific form of participation of each economy in the production of relative surplus-value on a global scale has determined both the pattern of industrialisation that followed, and the political processes through which it came about. In Brazil, industrial capital has accumulated through the state-mediated recovery of ground-rent, which has implied small-scale production for protected domestic markets. By contrast, in South Korea industrial capital has accumulated through the exploitation of a relatively cheap and disciplined workforce performing simplified activities for world market production in increasingly complex sectors. The significance of Grinberg's analysis for us is that, while South Korea's 'take-off' is often used to refute the original NIDL thesis, the Korean case actually vindicates the revised version of the NIDL thesis put forward by this book.

NOTES

1. See, for example, Inigo Carrera (2006, 2013, 2014, 2015). Several of Inigo Carrera's other working papers are available in English through the CICIP web site: <http://www.cicipint.org/CICIP%20English/Principal.html>.
2. The productive attributes of workers include the strictly material or technical dimension of labour-power required by the particularity and complexity of the productive functions to be performed, as well as its 'moral' attributes (that is, the general forms of consciousness and self-understandings that make those workers suitable for the specific forms of discipline that a certain organisation of the capitalist labour process entails). The term 'productive subjectivity' captures this twofold dimension of labour-power.
3. As Radice (2009: 29) summarises, 'the mechanism through which this unequal distribution of rewards is sustained is, in essence, that of market structure: businesses and zones engaging in core activities have market power based on superior technology, management and access to finance, while those engaging in peripheral activities have only generic resources of cheap land and unskilled labour, the markets for which are highly competitive.'
4. All three of these frameworks/concepts figure in the selection of articles edited by Bruff and Ebenau (2014). See Rioux (2015) for a critical discussion of Trotsky's notion of 'uneven and combined development', and for a thorough critique of the (failed) attempt to come up with 'a social theory of the international' in the work of Justin Rosenberg and others.
5. It ought to be self-evident from the foregoing outline of the approach taken in this book that a focus on country case studies does not imply a crude

methodological nationalism on our part. But to clarify, Part II focuses on countries for two reasons: first, because even if it is a mediating form and not a self-subsistent content, the national form is real and objective, and it is actually by exacerbating national differentiation that the global content of the NIDL unfolds; and it allows us to show that it is impossible to explain national dynamics as if they were autonomous from the global content of accumulation.

6. An appendix to Chap. 2, which we have been unable to reproduce in this book due to space constraints, is available at: https://www.academia.edu/24332230/End_Notes_to_The_general_rate_of_profit_and_its_realisation_in_the_differentiation_of_industrial_capitals_1?auto=download. In it, Iñigo Carrera confronts two crucial problems: first, the asymmetric relation between national economies of markedly distinct structures; and, second, the asymmetric relation between capitals of very distinct accumulation capacities within the same value chain. Until now, the first question has been approached by means of theories of development and underdevelopment, imperialism, unequal exchange, dependency, and so on. Iñigo Carrera asserts that these theories all conceive of national processes of accumulation as being essentially autonomous. The second question of the asymmetric relation within value chains has, until now, been explained by theories of imperfect competition and of monopoly capital. Both theories agree that such asymmetry results from the behaviour of key agents. Therefore both theories erroneously eschew the existence of objective determinations that regulate social production and consumption through the formation of a general rate of profit.

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PART I

Capital and the International Division
of Labour

The General Rate of Profit and Its Realisation in the Differentiation of Industrial Capitals

Juan Iñigo Carrera

NORMAL INDUSTRIAL CAPITAL

In the capitalist mode of production, the allocation of the total labour power of society into each form of concrete useful labour takes place by means of the formation of a general rate of profit. Through this process, the total capital of society acts as the subject of its own valorisation by determining individual capitals as its aliquot parts. Individual capitals thereby realise the material unity of the movement of the total social capital through their respective privately undertaken actions as sums of value that valorise in equal proportion with respect to their size and turnover time.¹

This chapter is a translation, adapted by the editors with the permission of the copyright holder, Iñigo Carrera, J. (2013), of ‘Capítulo 5: La tasa general de ganancia y su realización en la diferenciación de los capitales industriales’, in *El capital: razón histórica, sujeto revolucionario y conciencia*, second edition (Buenos Aires: Imago Mundi). An appendix to this chapter is available at: https://www.academia.edu/24332230/End_Notes_to_The_general_rate_of_profit_and_its_realisation_in_the_differentiation_of_industrial_capitals_1?auto=download.

J. Iñigo Carrera (✉)

Centre for Science as Practical Criticism (CICP), Buenos Aires, Argentina

The active participation of individual industrial capitals in the formation of the general rate of profit is dependent upon their reaching the necessary degree of concentration required (hence scale) to put into action the productivity of labour that determines the value of commodities.² The individual capital that has this attribute constitutes the *normal* or average for the sphere in which it acts. The production of relative surplus-value imposes the need to constantly increase the mass of value that must be accumulated for it to function as an autonomous normal individual capital.

The industrial capitals that fall behind in the process of concentration and centralisation cannot continue operating autonomously. They are compelled to become fragments integrated with other industrial capitals, that is, they are transformed into interest-bearing capitals.

SMALL INDUSTRIAL CAPITAL

As we have seen, industrial capitals that cannot keep up with the process of concentration and centralisation cannot continue operating autonomously, and are forced to turn themselves into interest-bearing capitals. However, they can postpone this outcome.

The valorisation of capitals smaller than the norm is not ruled by the general rate of profit but by the rate of interest, which is normally lower. And they do not access this lower rate in proportion to their value as independent industrial capitals. Instead, their value is reduced to that of the liquidation of their productive assets, which are now materially useless for the purpose of valorising as normal industrial capital. Therefore they can remain active as autonomous industrial capitals as long as the greater costs they incur for their small scale are compensated for by the lower profit that governs their existence as small capitals. This possibility of subsistence on the part of small industrial capitals constitutes in itself an obstacle to the development of the productive forces of society. Instead of immediately being displaced by those capitals that put into action the greatest productivity of labour, the extension of their individual life specifically obstructs the constant technical revolution imposed by the general determinations of the capitalist mode of production.

The limit to the subsistence of industrial capitals smaller than the norm is ruled by the general development of the productivity of labour. As soon as this development permits normal capitals to bring the price of production

below the price corresponding to the rate of interest on the value of liquidation of small capitals, the latter are finally expelled from production. However, the limit to the subsistence of small industrial capitals can be extended further still when small capitalists are, at the same time, their own direct workers. In this case, the subsistence of small capital in production can be extended to the point at which its owner receives the equivalent of the wage that she could obtain as a simple wage-worker. In agricultural production, in particular, this transformation into a wage-worker can involve a change in the place of residence, which pushes the equivalent salary downwards. The limit may be reached therefore at the point in which it is no longer possible to resume the productive cycle covering the replacement of circulating capital with the return from the fixed capital consumed—that is, at the expense of exhausting fixed capital without replacing it.

On the other hand, the rate of interest generally maintains a direct relation to the size of the individual interest-bearing capital; the greater the size of the individual interest-bearing capital, the greater the rate of interest and vice versa. In this way, the limit imposed simply by the relation between the general rate of profit and the rate of interest presents a gradation that is proportional to the size of the small capital. And this gradation accompanies the increasingly widening gap from the condition of normal capital that necessarily befalls the small capital due to its relatively slower pace of concentration—that is, owing to its lower rate of valorisation. Therefore, small capital is that which does not reach a size necessary for it to actively participate in the formation of the general rate of profit from within its specific sector of production. But the range of small capitals extends from those whose difference with respect to the normal capital in their sector is imperceptible in a given moment (they can *appear* big), to others whose owners are clearly on the verge of liquidation and proletarianisation. At the same time, the continuous growth of the productivity of labour in pursuit of renewed relative surplus-value constantly renews the generation of the range of small capitals. While it expels some from the bottom, it incorporates new ones that had existed as normal capitals in their own right, as it continuously raises the individual scale that, in general, is necessary for a small capital to remain active.³

Sooner or later, the development of the productivity of labour by normal capitals will make small industrial capitals reach the limit of their existence. In the end, they are transformed into interest-bearing capitals, if there is anything left of them by then. However, before arriving at this

point, it may be possible that small capitals expel normal capitals from the sectors in which they participate. This happens as long as their own limit price is located below the price of production. In this case, small capitals defeat normal capitals in competition.

THE RELEASE OF SURPLUS-VALUE BY SMALL INDUSTRIAL CAPITALS

The key to the subsistence of small industrial capitals comes down, therefore, to the relation between the price of production and the price that corresponds to the compensation between the small capital's greater cost and its respective lower rate of profit. Yet, it is not necessarily the case that the price regulating the valorisation of small capitals must correspond to the level of the price of production that regulates the valorisation of normal capitals. In effect, the price that autonomously regulates the valorisation of small capitals cannot be located above that of production, but nothing prevents it from standing below the price of production. In this case, the sale of commodities produced by small capitals for less than the price of production but above the price that rules their specific valorisation implies their appropriation of an extraordinary profit. This extraordinary profit does not result from production at an individual price below the social price of production through a greater productivity of labour. On the contrary, it results from the inability of small capitals to set in motion the productivity of labour corresponding, at least, to the determination of the price of production. Therefore, that extraordinary profit necessarily results in competition between small capitals for its appropriation, thus causing an expansion in production. But this tends to bring the price of small capitals' commodities to the level that constitutes the limit for their subsistence. As a consequence, the extraordinary profit in question, necessarily and eventually, escapes them.

In the case of small agrarian capitals, the first destination for the profit they release can be the pockets of the landlords whose land they rent. Small capitalists pay a premium above the rent corresponding to normal capitals. It can also be the case that this difference is reflected in the greater price small capitalists pay to buy land, which thus exceeds the simple capitalisation of future rent discounted at the rate of interest. This latter modality of appropriation makes small capitalists sink deeper still into such a condition, by the deduction that the greater price of land implies on the total

money capital they can turn into industrial capital to be applied productively upon the land.⁴ When the profit freed by small capitals follows this path—as it is either generated or advanced in a lump sum through the price of land—the commodities they produce are simply sold at the price of production. The rest of industrial capital has neither won nor lost by this, but the freed profit may follow a different path.

When the accumulation of the total social capital has developed the social division of labour between individual capitals to a limited extent, small capitals tend to directly serve the markets of means of subsistence with their products. In this case, the difference between the lower price that rules the valorisation of small capitals and the price of production appears to benefit merely individual consumers. The corresponding portion of the social surplus-value appears to go into the pockets of consumers via the lower price they must pay for their means of subsistence. However, the course of this portion of surplus-value does not end here. When individual consumers are free labourers selling their labour-power, the lower price at which they buy their means of subsistence is reflected in a cheapening of their labour-power. They are still able to consume the same use values required to reproduce themselves, in spite of receiving a lower amount of value as payment. In this way the surplus-value that had been freed by the specific determination of small capitals ends up being appropriated by industrial capitals as a whole, including small ones. This appropriation is realised as an aliquot part of the respective variable capitals. Therefore it becomes, in turn, a specific concrete determination in the formation of the general rate of profit.

As the accumulation of capital develops, commodities go through a succession of sectors specialised in partial stages of their process of production and circulation before arriving at individual consumption. When, in some of these stages, small capitals intervene by selling below the price of production, the portion of surplus-value that, for them, represents an extraordinary profit, continues to escape them. But to arrive at the market of individual consumption, this amount of profit has to continue its course through the circulation of normal capitals that follow small capitals in the chain. That is, the extraordinary profit in question escapes from the small capitals by means of the normal competition they establish between themselves in circulation. But it can only arrive at individual consumption in the form of a commercial price lower than that of production through the competition that normal capitals following in the chain establish between themselves.

In an immediate way, the release of profit by small capitals to normal capitals takes place through the latter buying commodities at the price that governs the normal valorisation of the former, which is to say, at below the price of production. Now, if the normal capitals were to sell their own product at the price of production, they would appropriate the extraordinary profit contained in the lower price of purchase. It therefore appears inevitable that the competition between them for that extraordinary profit would drag the commercial price at which they sell to below the price of production in corresponding proportion. However, this extraordinary profit does not emerge from those normal capitals putting into action a higher productivity of labour than the social average, so that they can therefore sell their commodities below the social price of production but above the individual price of production. The flow of normal capitals directly in pursuit of extraordinary profit would not respond to the possibility of expanding the total production of the sector, expanding the social necessity for the commodity by selling at below the social price of production at the same time, owing to the greater productivity of labour. As the extraordinary profit is borne by each individual commodity purchased, the competition between normal capitals for the extraordinary profit will only be limited by the expansion of each one's individual productive capacity with the intention of absorbing all that is on offer. No normal capital could refrain from competing for the extraordinary profit before reaching this point. But this would result in the expansion of production beyond the point at which the extraordinary profit was eroded—that is, before the market sale price started to fall below the cost of production. Therefore, the immediate competition between normal capitals for the extraordinary profit would result in their rate of profit falling below the normal rate.

The normal capitals of the sector to which flow the profits freed by the small capitals can compete between themselves for this extraordinary profit only by means of that which is common to all sectors of social production; by increasing the productivity of labour so as to be able to sell under the social price of production but above the individual price. But they cannot compete among themselves directly for the appropriation of the profit released by competition between small capitals to which they relate in circulation through the purchase of their commodities, on pain of destroying themselves as simple normal capitals. The greater the centralisation of capital within the sector into which the extraordinary profit flows, the more apparent become the limits to direct competition to appropriate it. Since the said competition cannot develop, the released

profit in question cannot pass to the following sector. It remains trapped as an extraordinary profit to be appropriated by the normal capitals that triumph in the simple competition established through the development of the productivity of labour. These capitals buy means of production at below their price of production, and they sell the commodities produced at the price of production.⁵

For the rest of the total social capital, this appropriation of extraordinary profit precludes the possibility of buying labour power at a reduced wage. In effect, its determination no longer includes means of subsistence being sold at below the price of production. But the autonomous organisation of social production does not provide protection against this situation; after all, the normal capitals of all the remaining sectors buy their means of production and labour-power strictly at the price of production. And the same happens with the means of subsistence bought by capitalists for their individual consumption. In the end, the formation of the general rate of profit is realised at a more concrete level by: determining the existence of below-normal industrial capitals that valorise at a lower concrete rate of profit; the existence of normal industrial capitals that valorise consistently at a higher concrete rate of profit; and [the existence] of normal capitals that simply valorise at the general rate of profit.

This is the true content which political economy inverts by explaining the differences in the concrete accumulation capacities by market-forms, under whose asymmetries this differentiation is necessarily realised. On the contrary, we must grasp the necessity of those market forms as modalities through which the equalisation of profit rates is realised in the concrete form of the differentiation of individual capitals based on their size; that is, from their determination as masses of value that bear no qualitative specificity other than a purely quantitative difference.

THE FRAGMENTATION OF THE PRODUCTIVE SUBJECTIVITY OF THE COLLECTIVE WORKER ON THE BASIS OF THE SUBSISTENCE OF SMALL INDUSTRIAL CAPITAL

When the total social capital needs to intensify the fragmentation of the productive subjectivity of the working class, it uses the differentiation between the individual capitals, discussed above, to realise it.⁶ The precariousness in which decomposing industrial capitals find themselves because of their insufficient size makes them particularly well suited to exercising

the brutal exploitation of labour-power whose productive subjectivity is being degraded in the manufacturing division of labour and in its condition as an appendage of machinery. In contrast, this same role can be played by the capital that appears in the opposite pole to small capitals; that is, the capital centralised as property of the state. This possibility is predicated on the constitution of those conditions of exploitation as the general norm within the national sphere.⁷

This functional division in the extraction of surplus-value provides normal capitals with the continuous flow of extraordinary profit discussed earlier. At the same time, the acceleration of the process of concentration and centralisation brought about by the transformation of the productive subjectivity of the worker in large-scale industry guarantees to capitals that triumph in that process the renewed flow of small capitals that release the aforementioned profit. A good part of the success of just-in-time production lies in: the development of information and transport systems; the flexibility of production processes; and in the development of systems of quality control based upon the automation of production processes. But the secret of the other part of its success is merely the reduction for normal capitals of immobilised stocks, at the expense of the accumulation of stocks provided by the small capitals which act as their suppliers. That is, thanks to the lower rate of profit that rules their normal valorisation.

For its part, 'outsourcing' consists purely in the multiplication of the sources of extraordinary profit for normal capitals on the basis of introducing independent small capitals for any of those processes of production and circulation that can be handed over. This introduction is facilitated by two conditions: the relative cheapening of production in limited batches, typical of small scale production, thanks to the automation of the processes of adjusting machinery; and by the more acute conditions of exploitation of labour-power typical of small capital, by virtue of differentiation within the working class. Modern outsourcing is no more than the old putting out system in the guise of scientific management.

CAPITAL SPECIALISED IN THE DEVELOPMENT OF TECHNICAL INNOVATIONS

Individual capitals do not immediately aim to produce relative surplus-value. From their point of view, an increase in the productivity of labour above that of their competitors has only one objective. This is to appropriate an extraordinary profit by selling below the social price of production,

to realise on the market the output resulting from an increase in productivity, but at above the individual price of production corresponding to this greater productivity. However, the extraordinary profit disappears as soon as the new technique becomes the general modality of production, which tends to determine the social price of production. If this diminution of the price of production takes place in a sector of social production that, directly or indirectly, intervenes in the production of means of subsistence for the workers, it results in a decrease in the value of labour-power and, thus, in the production of relative surplus-value. Therefore, the production of relative surplus-value excludes the existence of a continuous flow of the extraordinary profit in question for the capitals from any sector of social production and, therefore, the continued realisation by these of a rate of profit superior to the social average.

The capitals that set in motion an increased productivity of labour within a sector of social production are not the only ones that can claim the extraordinary profit generated; it can also be claimed by capitals further upstream whose output consists in the novel means of production that is adopted by capitals further downstream. The capitals downstream that purchase the machinery in order to generate an extraordinary profit will be disposed to pay more for them than the price of production, providing the price paid allows them to cheapen the cost of their own commodity to the point of being able to sell it above the individual price of production. That is, capitalists selling machinery that makes possible the production of extraordinary profit are going to participate to a greater or lesser extent in its appropriation, capitalising it in the price of the new machine. In any case, this participation in the extraordinary profit will disappear as the use of this new means of production becomes more general. However, this changes when the objectified form of the general source of increase in the productivity of labour becomes the product of a special sector of social production. That is, when the production of the technical innovation becomes a sector separate from the production of the machinery in which that technical innovation is materialised. Each renewal of the productive cycle in this sector yields a product for which there is demand by virtue of it allowing the appropriation of extraordinary profit by the capitals that use it. In this way, the capital producing this commodity with the power to increase control over the forces of nature, can achieve a continuous flow of extraordinary profit, constantly renewing the basis for its capitalisation through the selling price.

The transformation in the direct subjectivity of the worker in the process of production is manifest therefore in the emergence of capitals that

have the potential to accelerate their accumulation by continually receiving a flow of extraordinary profit, since its product is the basis for a permanent renewal of this flow. Far from violating the law of the formation of the general rate of profit, this capacity for accelerated accumulation merely arises from its realisation. Neither direct competition for the flow of permanent extraordinary profit among those capitals that produce the commodity that makes this profit possible, nor its continuous dilution at the hands of competition between the capitals that effectively utilise this commodity as a means of production, hinders the renewal of this flow.

Since the production of relative surplus-value depends upon the sector specialised in the production of the advance in the objectified capacity to control natural forces, the total social capital has a permanent and substantial reason to participate actively in it by means of its general political representative, that is the state. On the one hand, this production must generally be undertaken on a large scale, which is dependent upon a corresponding degree of the concentration of capital. On the other hand, because of its material form, it is a production in which a good part of the applied capital, if not all, can end up being spent without producing any use value. Since it is about increasing conscious control over the labour process, nothing guarantees the success of this process of production. Therefore, embarking on unproductive paths is a normal condition in achieving effective development. That is why a good part of this production must normally be undertaken by the total social capital itself. This means financing private capitals even if they do not obtain results, or taking on production directly through a state system of research and development. At the same time, when sellers and buyers of the innovations find themselves systematically separated by a national border, there takes place a continuous flow of extraordinary profit from the national sphere of the consumer of that innovation to that of the producer. This reinforces the necessity for every national state to directly participate in this production, in representation of its respective national portion of the total social capital.

FROM THE DIFFERENTIATION OF CAPITAL TO THE DIFFERENTIATION OF NATIONAL PROCESSES OF ACCUMULATION

Historically, the global process of accumulation of industrial capital did not start in an immediately worldwide concrete form. On the contrary, it arose as a confluence of various national processes of accumulation struggling

to produce within their national sphere the generality of the commodities they consumed. This integrity of social production and consumption that takes place within a domestic sphere gives an individual appearance to each national process of accumulation. They seem to be whole units of social capital, and not national fragments cut out from the total social capital. To the extent that their effective content fits into this appearance, the accumulation of capital in 'classic' countries takes the concrete forms that immediately correspond to its most simple and general determinations. However, this does not contradict the fact that these spheres are still national fragments of the same total social capital, rather than mutually independent social capitals. In their struggle to affirm themselves through their relative independence, these national processes of accumulation clashed in competition, which is how the process of the global accumulation of capital took shape.

The formation of the world market has an immediate manifestation that goes beyond simple competition to sell the same commodity. The reproduction of individual capitals has, as an immediate condition, the general reproduction of their own national sphere of accumulation. In turn, the reproduction of the national working class as an active population *en masse* has, as an immediate condition, the very same general reproduction of the national process of capital accumulation. Therefore, the capitalist class and the working class in every country establish a direct relation which, in turn, places them in an antagonistic relation with the homologous unity between the class of exploiters and the class of exploited of other countries. This direct relation arises as a limit to the direct relation of international solidarity between the national working classes through which the general buying and selling of labour-power at its value necessarily takes concrete form.

The unity of each national process of accumulation is directly manifest by means of the antagonistic relation that these national processes establish with each other in the world market. The individual capitals do not simply compete as themselves in the world market, but as capitals that immediately represent the distinct national processes of accumulation. Competition in the world market, that is the concrete form through which the unity of the organisation of social production in capitalism is realised, is always mediated by the direct relation between the capitalist and working classes delimiting each national sphere. Therefore, the circulation of commodities in the world market is necessarily mediated by the direct relation that the general political representatives of each national fragment of the total social capital establish with each other—which is to say by the direct

relation between the respective national states. The competition between individual capitals in the world market therefore takes a first specific form, that is, competition to sell to the capitals of other national spheres, and to avoid having to buy from them, as a means of expanding as much as possible the scale of their respective national processes of accumulation. Except that, of course, this expansion is dependent upon external supply.

Until now, we have considered the relation between 'classic' national processes in which the accumulation of capital is present in its most simple and general form. However, another form of international relations develops out of this relation between 'classic' national processes of accumulation. In addition to the struggle to sell without buying, the capitals of those national processes of accumulation establish a second focus of mutual competition in the world market; namely, the competition for the supply of raw materials from territories historically located beyond their borders. This concerns production processes in which the productivity of labour is particularly subordinated to natural conditions that are not under the control of normal capitals, and these conditions are most favourable—or simply exist—in those territories located outside 'classic' national spheres where accumulation presents itself in its simplest form. At the same time, capitals from the 'classic' spheres look to expand their own foreign market, selling to capitals or simple commodity producers that provide raw materials from those other national spheres. The capitals and commodity producers in the latter territories now have the capacity to buy since they have sold on the same world market.

Further still, to produce capitalistically in the new territories oriented to the supply of raw materials, with a greater productivity of labour to that prevailing in the 'classic' countries, it is necessary to disburse the capital needed for production and circulation. Its application must therefore be realised on a scale that corresponds to the determination of the price of production on the world market. On the one hand, this capital is gradually provided by the expansion of local accumulation in the new territories. But, as with the simple concentration of capital, this is a slow process that can even make it unviable. On the other hand, for the normal capitals from the 'classic' national processes of accumulation that demand the supply of raw materials, their application in these new productive processes constitutes a source of surplus-value as good as any other. Furthermore, this source can even be circumstantially better, so long as it entails rapidly expanding production, if it is possible to exploit the labour-power of the new country on the basis of the direct relations of personal subordination

that already prevail there—or that can be imposed upon it.⁸ Therefore, the process of the expansion of global capitalism based upon the differentiation of national processes of accumulation is not only characterised by the expansion of the flows of commodity-capital in the world market; it is also characterised by the flow of industrial capitals and of interest-bearing capitals from the ‘classic’ countries in which accumulation is based upon the general production of commodities to those countries in which accumulation is based upon the production of commodities bearing ground-rent. Of course, there is a corresponding flow in the opposite direction of the profits and interest that capitals appropriate in the latter countries. In particular, given that the scale of accumulation in the latter is specifically restricted to the production of commodities bearing ground-rent, as well as the complementary production processes that are necessary at the local scale so that those commodities can arrive at their destination, surplus-value flows out of the national spheres in question since it is not required to expand accumulation therein.

The incorporation of ‘resource rich’ territories with the objective of invigorating the ‘classic’ national processes in which accumulation appears in its general form has a first historical modality: the direct conquest of those new territories on the part of the ‘classic’ national fragment of the total social capital that is making use of them. It therefore consists in the military subordination of those territories to the jurisdiction of the conquering national state. The development of the world essence of the accumulation of industrial capital therefore takes the concrete political form of the development of the colonial system, of colonialism.

When the concrete history of the new territory prevents direct military occupation, the formation of an independent national sphere of capital accumulation takes the place of colonial domination. But it does so on the condition that the new national sphere does not reach the scale that is necessary to give rise to a process of accumulation immediately based on the production of the generality of commodities. Certainly, national fragments of the total social capital already in operation have no interest in creating new competitors in the world market. Instead, they are only interested in their geographical expansion to the strictly necessary point at which they can access the supply of raw materials produced with a higher productivity of labour, to increase the relative surplus-value that they appropriate in their national sphere of origin. Insofar as they have been engendered as a necessary concrete form of the expansion of the accumulation of capital in ‘classic’ countries, this second type of national

accumulation process lacks from the very beginning the potentiality to become a 'classic' country.⁹ The total social capital thus imposes, in various characteristic ways, specific limits to the potentiality of these national fragments *vis-à-vis* those in which accumulation takes place on the basis of production on a normal scale of the generality of commodities consumed domestically. For example: through the direct diplomatic and military action of national states from 'classic' national spheres of accumulation; through the supply of commodities usually produced with a productivity of labour unachievable on the scale of the new national sphere; and through the external indebtedness of the new territories. It needs to be stressed that, in all cases, these are the concrete forms taken by the realisation of the limited immanent potentialities of the accumulation process in those new national spheres of accumulation, and not its causes, although this is how it is pictured by those who believe that the accumulation of capital is a national process in essence, and not simply in form.

The production of raw materials from the national spheres specifically constituted for this purpose ('resource rich' countries) diminishes the value of labour-power exploited directly by industrial capitals that operate in the 'classic' national spheres where accumulation includes the production of the generality of commodities. It acts, therefore, as a source of relative surplus-value for these normal industrial capitals. However, this also involves a drain of surplus-value that these industrial capitals extract from the workers they exploit. A part of this goes into the pockets of the landlords who monopolise the differential and absolute natural conditions that permit the exercise of the greater productivity of labour in the production of raw materials in the form of ground-rent. The industrial capitals from which this portion of surplus-value is drained find themselves impeded—in the last instance by the sacrosanct principle of rights over private property—from recuperating the ground-rent appropriated by landlords within their own, respective 'classic' national sphere. But those industrial capitals from 'classic' countries do not confront the same problem as regards the portion of surplus-value which is appropriated in national spheres specifically delimited to the differential production of raw materials. All this therefore leads to a *new phase* in the global accumulation of capital based upon the differentiation of the national processes of accumulation between those 'classic' spheres where capital produces the generality of commodities and those whose unity hinges upon the production of one or more raw materials bearing ground-rent.

Each national fragment of the total social capital delimited by this second type of national sphere has its unity determined by the productive process that gave rise to the appropriation of differential and, eventually, simple monopoly ground-rent.¹⁰ Hence, the general political representative of that national fragment of the total social capital, that is the respective national state, can act directly upon the mass of ground-rent that is appropriated within its country. Above all, it can become the direct owner of the land whose differential natural conditions allow the appropriation of ground rent. Alternatively, it can interrupt the flow of the ground-rent primarily flowing into the pockets of the landowning class through, for example: special export taxes on raw materials; the fixing of internal obligatory prices for these commodities; their production or commercial exchange by the national state itself; or the overvaluation of the national currency.¹¹

In a first historical phase, prior to the 1930s, the portion of ground-rent appropriated in these forms had a primary destination. It was used to pay for foreign public debt borrowed at extraordinarily high interest rates to the capitals of the countries from where the ground-rent flowed. Previously, the funds originated by this indebtedness had been completely squandered instead of being used productively to enhance the general accumulation of capital in the country. More specifically, they had been devoted to the free private appropriation of the territory by the landowning class and to the very formation of the national sphere specifically based on the export of raw materials through warfare against similar countries. It was thus evident that those landowners and foreign capitalists who were creditors of the national state were partners in the formation of national processes of capital accumulation and now shared the appropriation of its fruits; that is, of the surplus-value that flowed towards the country in the form of ground-rent. They were joined by the industrial capitals of the same countries from which ground-rent flowed and which were put to work in the local circulation of raw materials.¹² They participated in the appropriation of ground-rent through the charging of higher prices than in their countries of origin and by taking advantage of the overvalued national currency when remitting abroad the profits obtained internally.

Through interest-bearing capital and the industrial capitals that operated specifically in the circulation of raw materials, the national processes of capital accumulation from where the surplus-value escaped in the form of ground-rent recovered as much of it as possible. However, in a second historical phase, clearly visible after the crisis of the 1930s, this recov-

ery went directly into the hands of the industrial capitals from which the surplus-value in question had escaped.

In order for the ground-rent captured by the direct action of the national state to continue its return to the industrial capitals from which it was drained, these capitals must open and close their valorisation cycle within the national sphere of 'resource rich' countries. Therefore, this national sphere of accumulation has to exclude the possibility of industrial capitals initiating their cycle outside of it and selling their commodities within it. It must constitute itself, therefore, as a national sphere essentially closed to the import of commodities in general, to the extent that the appropriable ground-rent allows for their local production.¹³ But, in so doing, this national sphere rules out the valorisation of capitals that locally produce commodities in general on the scale necessary to compete on the world market. It would appear, therefore, that ground-rent can only be appropriated by industrial capitals of insufficient scale to participate in the formation of the general rate of profit, which is to say, by capitals of less than normal or average concentration with respect to their sector of industry, that is, by small capitals. Meanwhile, industrial capitals from which surplus-value has been drained in the first place cannot meet either of the two conditions required for participating in its appropriation within the closed-off national sphere. In the first place, they do not open and close their cycle within the national sphere where the appropriation takes place. Second, their scale generally corresponds to the average necessary to participate in the formation of the general rate of profit in the world market, as they are the most concentrated capitals in the world.

Certainly, a first striking feature of a process of accumulation structured by the general production of commodities for a closed domestic market on the basis of the appropriation of ground-rent is the proliferation of small local industrial capitals. The said appropriation takes place through: the allocation of ground-rent in the form of direct subsidies; the buying of commodities by the national state at prices higher than those of production; public spending that creates the purchasing power to buy the production of small capitals and which, at the same time, generates a deficit financed by monetary issue that, in turn, results in a negative real interest rate at which those small capitals are indebted; and so on.

However, the expansion of small industrial capitals is but the first necessary requirement to generate the bases that make it possible for 'foreign' *normal* industrial capital to become the key beneficiary of ground-rent, in association with the local landowning class. This capital must detach

from itself a *fragment* of insufficient scale to produce competitively on the world market, but which is sufficient to function as the most concentrated industrial capital that operates within the national sphere where the ground-rent is appropriated, given the size of this domestic market. This marks a significant difference from the previous historical period. In that earlier phase, the detachment of fragments of normal capitals from their country of origin to be able to valorise in new ones was dependent upon these fragments maintaining the attribute of being normal capitals, which is to say, that they had sufficient scale to produce for the world market. By contrast, in the new phase the detaching fragment of normal capital need only reach the restricted scale corresponding to the closed-off internal market of the national process of accumulation in which it is going to valorise.¹⁴ In restricting itself in such a way, it becomes incapable of competing on the world market. The specific restricted scale with which this fragment of capital operates deprives it of the capacity to valorise at the general rate of profit. In part, this deprivation is to be compensated for by the most acute concrete conditions in which the exploitation of local labour-power takes place. But, above all, this deprivation is to be compensated—if not more than compensated—for by the appropriation of two sources of surplus-value now available to it by virtue of opening and closing its cycle within the national sphere in question: on the one hand, the ground-rent whose appropriation by industrial capital is mediated by the direct regulation of the national state; and, on the other, the surplus-value that is released in the competition between genuine small industrial capitals that link themselves to the fragment of normal capital in internal circulation.

In this way, normal capital valorises at the general rate of profit (and even at a higher rate of profit) by detaching from itself a fragment of a specifically restricted magnitude. Thus, it accumulates by doing the precise opposite of its general need to constantly expand the scope of the conscious control of social labour under its private command.¹⁵ At the same time, it recuperates from the scrapheap the means of production (machinery, patents, and so on) now deemed obsolete by the growth in scale required to compete in the world market, but which appear as cutting-edge at the scale of the closed-off internal market in which they are now put to work. Normal industrial capital that valorises in this way is liberated, in corresponding proportion, from its historical generic necessity to develop the productive forces of society on the basis of constantly advancing the transformation of individual free labour into an immediately social power.

This mode of appropriation by industrial capital of the surplus-value that originally escaped from its hands in the form of ground-rent, necessarily takes the concrete form of an internal market closed to any normal capital from the world market—unless that capital detaches from itself a fragment of a specifically limited magnitude that will valorise as an industrial capital only *within* the national sphere in question. This is a condition that normal capitals need to impose *upon themselves* in order to realise this mode of appropriation. If this were not the case, normal capitals that produce from abroad and which, therefore, maintain an appropriate scale corresponding to the supply for the world market would wipe the floor with the fragments of normal capital that operate on a scale specifically adequate to the restricted scale of the internal market. But, at the same time, this fragmentation is a necessary moment in the generation of the modalities of the appropriation of ground-rent. Thus the fragments of specifically restricted scale from the most concentrated capitals of the world are the first to clamour for the protection of the national state of the country in which they have installed themselves, arguing their case as incipient industrial capitals in a struggle to consolidate themselves in the face of foreign competition.

The relative enclosure of the national sphere of accumulation presupposes the political autonomy of the national state. This national modality of accumulation clashes, therefore, with the colonial organisation of the supply of raw materials and the formation of markets for direct export from the 'classic' countries where accumulation takes simplest form. For the same reason, the specifically restricted fragments that are detached from normal capitals need to be politically represented in another specific way. That is, they need to be represented by their own national state, through its relation with the formally autonomous national state where the fragments are going to valorise. As the existence of this second state is but the concrete form of realising a particular aspect of the process of accumulation of the portion of the total social capital politically represented by the first, there is no doubt as to which of the two states is to have more political and military force when they are confronted formally as equals in an international relationship.

However, within its own national sphere, the local state plays a much more prominent role. Its actions take place at the very centre of the process of the appropriation of ground-rent. It becomes, therefore, the political subject that appears to create through its direct action a national process of capital accumulation that, according to the magnitude and form of the ground-rent it has at its disposal, more or less resembles one in which

industrial capital tends to produce the generality of the commodities consumed in the domestic market. The state's own apparatus thus *appears*, in an inverted fashion, as the social subject capable not only of politically representing in a general manner the national process of accumulation, but also of engendering this process by itself. In this way, the fragments of normal capital manage to be represented internationally not only by their own national state of origin, but also by their local political representation exercised through the state apparatus from the country in which they are operating. However, this national process of accumulation must necessarily take the concrete form of an autonomous political process. As a consequence, the constitution of the national state can only result from the action of the local social classes.

The first social class that acts directly for the formation of an autonomous national state is that of the local landowners, who will begin to appropriate ground-rent as soon as land is put into production. The national petty bourgeoisie also acts, in association with the former, in the formation of the autonomous national state, even if this association appears in the form of a fight to the death over the appropriation of rent. This petty bourgeoisie engenders itself as the owner of the mass of small capitals that will constitute the basis for the later entrance of the restricted fragments of normal capital from abroad. In turn, the expansion of small capital, whether genuine or the particularly limited fragment of normal capital, engenders the national working class. This national working class may have originated in the transformation of the traditional local peasants, or it may have had its genesis in the import of workers from other countries. But, in any case, it ends up being peculiarly determined by the very specificity of the national process of accumulation. However much this national working class confronts the local petty bourgeoisie and the local representatives of the fragments of normal capital in the struggle over buying and selling labour-power at its value, it finds that its own immediate reproduction as an active working class is subject to the reproduction of the national process of capital accumulation. Thus it is subject to the reproduction of the specificity of that process. Therefore, the political party that embodies the general representation of the national working class acts as a specific political representative of this reproduction. Without going further here, it becomes an immediate necessity for this political party to associate with the two aforementioned personifications of the industrial capital operating locally in the struggle against landowners over the appropriation of ground-rent. This political party faces the same situation with respect to

the confrontation that the same capital sustains against the normal capitals that operate in the world market as simple exporters of the generality of commodities. The general political representation of this type of national process of capital accumulation thus assumes its most characteristic ideological expression, that is populism (as a class alliance that acts on behalf of the national interests of the people).

The national process of accumulation into which ground-rent has primarily flowed, has failed to convert this mass of social wealth into industrial capital concentrated on a sufficient scale so as to *actively* participate in the development of the productive forces of society. On the contrary, only small capitals and specifically restricted fragments of normal capitals operate within it—that is, two forms of industrial capital whose existence is the negation of that development and, therefore, the negation of the historical *raison d'être* of the capitalist mode of production. At the same time, upon being tied in a specific manner to the generation and immediate reproduction of those two forms of capital, the national working class is deprived of the potential to revolutionise the material conditions of the social process of production. Therefore, it is deprived of the generic power of the working class to revolutionise the very mode of production.

However, all these negations and deprivations remain hidden, and appear inverted, when the analysis stops at the appearance that capital accumulation is above all a process of national nature. From this point of view, capital accumulation cannot be recognised as a process whose unity is *determined* by its global essence, and that is *realised* in the concrete form of mutually independent national processes. It thus appears that all national processes of capital accumulation have, in essence, the potentiality to include the production of the generality of commodities putting into action the productivity of labour corresponding to the valorisation of the capital that bears the development of the productive forces of society. The clear evidence that the national processes of capital accumulation in question are lacking in this potentiality is inverted as the expression of their insufficient development; insufficient development that, accordingly, appears as nothing but a mere stage in the natural course of every process of capital accumulation towards the realisation of its national essence. The negation of the development of the productive forces of society is thus represented, in an inverted fashion, as the affirmation of a national process of capital accumulation on its 'path to development'. If this process does not fully travel down the path to 'full development' as an autonomous national process of accumulation, the matter is solved by claiming that such a cir-

cumstance can only be due to the application of 'incorrect' economic policies or the presence of some internal 'deformity' or 'perverse behaviour'; for example, the lack of 'capitalist' behaviour on the part of landowners.

In contrast to this open apology of a form of capital accumulation that negates its generic necessity to develop the social forces of production, 'anti-imperialism' appears at first sight to be its uncompromising critique. However, this critique is also based on the *appearance* that capital accumulation is, in essence, a national process. Therefore, it attributes to capital a potentiality that it not only lacks, but which is also the opposite to that which truly corresponds to its existence in the concrete form that it takes in the, allegedly, 'underdeveloped' or 'oppressed' national spheres in question. The potentiality that these latter lack is precisely manifest in the fact that national industrial capital, except for the part that bears the ground-rent, is not able to close its turnover cycle by selling in the world market. Such impotence comes from the insufficiency of the productivity of labour that capital puts into action in those national spheres, owing to the insufficiency of its scale in relation to that determined by the formation of the general rate of profit in the global unity of accumulation. Yet, once the national fragment of accumulation is considered as its natural unity, the norm corresponding to capital accumulation's global essence appears ideologically inverted; it is not that the national fragment of the total social capital has an insufficient degree of concentration, but that those they confront in the world market have an abnormally excessive concentration—an inversion that can only be completed by reducing all essential differences in the capacity for accumulation of one or other capitals to their manifestation in circulation and to the political and military forms they take.

The specific limitations that prevent the expansion of the scale of these national processes of capital accumulation, and that arise from the fact that they are based upon the negation of the development of the productive forces of society, are in this way inverted as an external circumstance on a double basis. On the one hand, the power exerted by capitals that reach the normal level of concentration required to sell in the world market, which derives from their being bearers of the development of the productive forces of society, *vis-à-vis* the restricted power of those that subsist against the grain of that tendency, becomes ideologically represented as the exercise of an abstract 'monopolistic' character. On the other hand, the consequent differential power of the respective national state as the political representative of a national accumulation process bearing in its

unity the development of the social productive forces over a state that politically represents a specific negation of this development, is ideologically conceived as the exercise of an abstract 'imperialist' character. In summary, the affirmation of the political autonomy of the national accumulation process as a condition for the appropriation of ground-rent by normal capitals that operate as such in their own countries, which partially liberates these capitals from their generic necessity to develop the productive forces of society, is conceived ideologically as an inverted process of 'national liberation' against 'monopolistic imperialism'.

The general growth in the concentration and centralisation of capital has a double effect on the reproduction of the specificity of these national processes of accumulation. On the one hand, it continually widens the gap between the productivity of labour that must be put into action to compete on the world market, and that which is sufficient for the specifically restricted magnitude of the national market. As a result, the reproduction of the national process of accumulation in 'resource rich' countries is dependent upon the availability of an ever-increasing mass of ground-rent so as to compensate for any productivity gap. On the other hand, the growth in the concentration and centralisation of capital in the relative terms that apply within the national sphere necessarily takes a specific form. It consists in the expropriation and liquidation of simple small capitals at the hands of the particularly restricted fragments of normal capital that operate within the country. This expropriation does away with the surplus-value that is released by those small capitals, and which constitutes one of the sources that enable the fragmentation of normal capital to operate at the restricted scale of the internal market. At the same time, this multiplies the mass of fragments of normal capital whose valorisation is specifically based upon the appropriation of ground rent and of the surplus-value released by small capitals. As soon as the ground-rent ceases to grow rapidly enough to compensate for the widening gap in the productivity of labour and the absolute and relative reduction of the surplus-value released by small capitals, the national process of capital accumulation reaches the specific limit to its reproduction. It enters into a contraction of scale, which can be merely relative with respect to the global pace of accumulation, or directly absolute. As a consequence, the reproduction of the national process of accumulation loses its original condition of being the specific basis for the expansion of the local demand for labour-power and turns into a correspondingly specific source of surplus labouring population in the process of consolidating itself in such a

condition.¹⁶ Before, this national process of capital accumulation mimicked that based upon the production of the generality of commodities for the world market, and, therefore, a process of development of the material productive forces of society. Now, its true content against the grain of such developments, and, therefore, as a source of multiplied misery and suffering for the working class, has become immediately manifest.¹⁷

The development of capital accumulation on the basis of the production of relative surplus-value has yet another effect on the specificity of national spheres. It massively transforms those peasant populations settled outside the countries in which they take the simplest form into a surplus labouring population. In part, capital produces this surplus population in such a magnitude that it no longer necessarily requires a proportion as an industrial reserve army. This population is consolidated as a surplus to such an extent that it is deprived of any potential productive subjectivity. When not reduced to this desperate condition, capital converts the peasant mass into a working population from which emerges the labour-power whose productive subjectivity consists in functioning as an appendage of machinery in the modern division of labour. Thus, it is generated as a latent surplus labouring population until the development of automation allows for the fragmentation, in an ostensible manner, of the reproduction of workers bearing the two types of productive subjectivity typical of large-scale industry.¹⁸ Then, capital effectively puts this degraded productive subjectivity into action on the basis of the specific differentiation of its reproduction with respect to that portion of the working class which is a direct bearer of the development of the productivity of labour through an advance in the objectified control of natural forces.

Whether it is a consolidated surplus population, a latent one, or a labouring population that remains active on the basis of the degradation of its productive subjectivity, capital needs to remove all direct relations between all three segments of the working class and the portion bearing the productive subjectivity that advances in the control of the forces of nature. Furthermore, it needs to eradicate all direct relations between those three forms of existence of the global working class and the organ of the collective labourer of degraded productive subjectivity, which is simply a relative surplus population *vis-à-vis* the needs of the accumulation process, but which must remain localised in direct contact with the bearer of the developing productive subjectivity. Any direct relation that the first portions of the labouring population maintain with the second constitutes an obstacle to the differentiation of their conditions of reproduction.

Capital cannot liberate itself from reproducing the second upon the basis of the conditions that correspond to the reproduction of labour-power bearing the most developed productive attributes.

The direct relation that clashes most starkly with the differentiation in the conditions of reproduction of the working class, according to the distinct types of productive subjectivity, is that of the citizenship of the same national state. The colonial system establishes a direct citizenship relation that unites the two portions of the working class, no matter how asymmetric this relation might be. When entire territories move towards the condition of reservoirs of surplus population, the national fragments of the total social capital from 'classic' countries lose all interest in keeping political control over these territories. Furthermore, this occurs when the development of the general phase of relatively undifferentiated production of labour-power in activity is still in full swing.¹⁹ The colonial system thus loses the last basis of its existence. Not accidentally, this is the moment when 'every man for himself' replaces the alleged 'commonwealth'. The colonialist states therefore sharpen their direct oppression of the population and the economy of the colonies until achieving political independence becomes a condition for the immediate reproduction of human life within them, even as a surplus population. The hour of triumphant anti-colonialist revolutions has arrived.

The capitalist apology based upon the inversion of the global unity of capital accumulation as an inherent attribute of every national process returns to the scene. From this point of view, the determination of the population of the new national spheres as a surplus labouring population stripped of its productive subjectivity by the growth of capital accumulation, appears as the consequence of an insufficient development of capital accumulation in these new national spheres. The very result of the full global development of capital is thus represented as its opposite, as a product of national 'under-development'. This apology has its correspondence in the critique based upon the same inversion. The more capital manages to feed accumulation on the basis of differentiating the reproduction of labour-power according to the productive attributes that it demands from each one of the fragments of the working class, the more it is liberated from its generic necessity to produce wage-workers bearing a universal productive subjectivity. Consequently more capital accumulates, in spite of moving against its generic historical necessity to develop the productive forces of society. However, the critique based upon the appearance of the national essence of accumulation sees an inverted content in the concrete politi-

cal forms taken by the process in which capital is liberated from its own historical necessity. According to this critique, this consists in the defeat of 'imperialism' exercised by national states of 'monopolistic' capital at the hands of the processes of 'national liberation' of the 'oppressed peoples'.

NOTES

1. *Editors' note:* In accordance with the Marxian notion of capital-as-process, and of the concentration of capitals, Iñigo Carrera uses the Spanish word *monto* (amount or discrete magnitude), which we translate throughout this chapter as size.
2. This determination of industrial capitals formally extends to commercial capitals. These do not produce surplus-value, but, on the contrary, are themselves an unproductive expenditure of surplus-value. Commercial capitals whose scale permits the minimum unproductive expenditure of surplus-value necessary for their realisation participate in the distribution of the total surplus-value produced by the productive workers of industrial capitals. For greater clarity, the exposition only makes reference to industrial capitals. But, *mutatis mutandi*, the reasoning also applies in a formal manner to commercial capitals.
3. However large may be the scale of concentration required for an individual capital in a sector of social production to put into action the productivity of labour that corresponds to the determination of the value of the respective commodities produced, and even if to reach this concentration in a sector the same industrial capital needs to extend over several sectors, this degree of concentration is the one that defines normal capital. This is, therefore, the proper scale of individual capital without qualifications. The category of 'big capital' applied to normal capital does nothing but reflect the point of view of the ideological representatives of small capital, that is, the one that has particular restrictions in its capacity for self-valorisation due to its insufficient size. The purpose of this category is to give normal capital and small capital equal status so as to make them appear as simple species of a same genus, only differentiated by the power that seems to abstractly emanate from their magnitude. This is intended to hide the fact that, whereas the former bears in its increasing concentration the development of the material productive forces of society in the capitalist mode of production, the subsistence of the latter is an expression of the hindrance to that development raised by this same mode of production. Lenin uses the expression 'big capital' uncritically (Lenin 1964: Chap. 2) precisely from the economists of his time, who expressed the mentioned conception about the scale of concentration that was being reached by normal capital

at that moment. Lately, this category has been repeatedly used as if it contained in itself the revolutionary critique of the capitalist mode of production.

4. It is apropos of the determinations of ground rent with regard to small industrial capital applied to agrarian production that Marx, in *Capital*, leaves open the question of the specificity of the valorisation of small industrial capitals (Marx 1981: 938ff). And it was reasonable that Marx did not elaborate since—in contrast to the beliefs of those who put the differences in the concrete capacities of accumulation at the core of their analysis of the general historical development of the capitalist mode of production (resorting to the categories of monopolistic capital, big capital, and so on)—this differentiation is irrelevant for that development. It only relates to the concrete forms of competition. This, of course, is far from saying that it must be explained through the forms of the market.
5. We consider here only the simplest form of the flow of profit released by small capitals of one sector to normal capitals of another, in which the commodities sold by the former to the latter act as the vehicle. However, *mutatis mutandi*, the same determinations are valid for the inverse path, in which normal capitals of one sector sell their commodities at above the price of production, in the proportion required, to the small capitals of another sector.
6. *Editors' note* (see Chap. 4).
7. *Editors' note*: as is the case, for instance, for state-owned companies in contemporary China.
8. The capitalist mode of production is but the necessary historical form in which society develops its productive forces on the specific basis of transforming the productive powers of free individual labour into productive powers of free collective labour, in the concrete form of being the very negation of social labour, that is, as private labour. Therefore capital removes all forms of labour organised on the basis of relations of personal dependence, whether of a coercive nature or not. It needs to impose everywhere the labour of the doubly free workers, as in the sense of not being subordinated to any relation of personal domination, as well as being separated from the means needed to reproduce their life by working individually. That is to say, it needs to impose forced labour everywhere, not through direct coercion upon the workers, but based on their very condition as free individuals. Nonetheless, due to its immanent contradiction consisting in socialising free labour as an attribute of private labour, that is, of the very negation of the immediately social character of free labour, capital does not give up any chance to multiply its valorisation by acting against its own *raison d'être* as a specific historical form of the development of the productive forces of society. Hence, whenever the immediate multi-

plication of relative surplus-value by means of advancing the private socialisation of free labour is not at stake, it becomes the champion of forced labour through direct coercion against the worker. Agriculture and mining provide a twofold specific basis for this. Firstly, the submission of the productive power of labour to natural conditions not controlled by normal capital is a limit to the development of the technical composition of capital. Therefore, the productive attributes of free labour take longer to express their specific potentiality compared to industrial production in general. Secondly, the subsistence of relations of personal subordination that are the foundation upon which the direct coercion exercised by capital is based, presupposes the direct attachment of the worker to an essential means of production, namely, land. This circumstance has created the inverted appearance that social processes of production ruled by the production of capitalist commodities for the world market are but the expression of the subsistence of feudal or slavery relations prevailing over the valorisation of capital. An inversion from which it follows that the revolutionary path, in those cases, means engendering a national bourgeoisie that could establish locally the capitalist mode of production upon the remnants of feudalism and slavery. The more capital moves forward in its necessity to count upon a universal worker, the greater difficulty it finds in sustaining its valorisation in particular sectors of social production on the basis of the subsistence of directly forced labour. A clear example in this sense is the clash between industrial capital from the north of the USA with agrarian capital in the south over the abolition of slavery. But, at the same time, capital always keeps latent the choice for forced labour if it can be obtained with the productive attributes of free labour. The Nazi concentration camps are a brutal manifestation of this. In them, a portion of the total social capital lives the dream of any individual capital: counting upon an originally free labour-power without having to spend a penny even in its daily reproduction, as it could rely on a continuous flow of it and eliminate any individual immediately unable to work.

9. The exceptions to this determination can be counted, at most, on the fingers of one hand. But the case of the USA constitutes an absolute singularity. This is not the place to discuss this thoroughly. Nevertheless, we can quickly point out that this singularity synthesises several determinations. To begin with, the very emergence of the colony does not hinge on the production of precious metals used for circulation as world money based on indigenous labour-power. Nor does it hinge on providing forced workers for employment in other regions. On the contrary, it is engendered by British capital—in what matters for its future singularity—to satisfy the need to expand its own domestic market. And it does so by annihilating the indigenous population that organised its reproduction through direct per-

sonal relations. On this basis, it then occupies the territory with the surplus population generated by the development of its primitive accumulation and, afterwards, by the expansion of industrial capital in England and Europe. Hence, land ownership is fragmented among the settlers, in contrast with its concentration in the new territories devoted to the production of raw materials under the plantation system or to the breeding of livestock in natural plains. This contrast is also valid in relation to the south of the USA, a region that does not play a direct role in the determination of the singularity in question. Besides, the expansion of the domestic market could reproduce itself on the same basis by extending to the west, and on a scale greater than that possible in similar European national spheres. The formation of an independent national sphere on such a scale already implies a singular potentiality. But, additionally, the USA possessed within its own territory the two natural bases upon which large-scale industry historically developed: iron and coal.

10. *Editors' note:* hereafter, all reference to the appropriation of ground-rent refers to these two types of ground-rent (See Note 3 in Chap. 3, for a definition of the different types of ground-rent.).
11. *Editors' note* (see Chap. 3).
12. *Editors' note:* for example, through the construction and operation of the railway system.
13. *Editors' note:* Since ground-rent acts as the essential source of compensation for the higher production costs that result from the small size of the protected domestic market, the potentiality for the 'inward-looking' production of non-primary commodities depends on the magnitude of ground-rent flowing into the respective country.
14. *Editors' note:* here, Iñigo Carrera is mainly referring to foreign direct investment by transnational corporations since the mid-1950s in, for instance, Latin America.
15. *Editors' note:* in other words, it accumulates against its general tendency to strive to be at the vanguard of the development of the productive powers of social labour.
16. *Editors' note:* this has been the general course of capital accumulation in the southern cone of Latin America since the mid-1970s, and which underlies both its neoliberal and more recent neopopulist political and ideological forms (see Iñigo Carrera 2006; Grinberg and Starosta 2014).
17. Because of the material characteristics of agrarian production bearing rent, and the size and complexity reached by the national process of accumulation based on it, Argentina is the richest concrete case for the study of this specific national modality of accumulation (see Iñigo Carrera 1999, 2000, 2004, 2006, 2007).

18. *Editors' note:* Iñigo Carrera is here referring, on the one hand, to the expanded subjectivity of the organ of the collective labourer responsible for the more complex phases of the labour process consisting in advancing the conscious control of the movement of natural forces (that is, science) and its technological applications in the direct production process and, on the other, to the degraded productive subjectivity of direct production workers that confronts those productive powers as already objectified in the system of machinery (see Chap. 4).
19. *Editors' note:* Iñigo Carrera is here referring to the, so-called, Fordist or Keynesian historical cycle of accumulation and the Welfare State.

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The Global Accumulation of Capital and Ground-Rent in ‘Resource Rich’ Countries

Gastón Caligaris

Drawing upon Iñigo Carrera’s (2006, 2007) research on capital accumulation in Argentina, this chapter offers a general explanation of the particular characteristics adopted by national processes of capital accumulation whose main role is to supply ground-rent bearing commodities to the world market. The chapter adopts a methodological approach that recognises the concrete manifestations that such countries present as developed forms of the essential determination of *capital*—capital being the immediate subject of the organisation of the process of social life. Therefore, the chapter begins with an analysis that recovers the Marxian conception of the process of capital accumulation as being global in content and national in form. A perspective that, I argue, strongly contrasts as much with positions that explain the functioning of a national economy as a result of local class struggles, as with those which explain it as a result of foreign impositions within the national sphere. On the basis of the identification of ‘resource rich’ countries as being organs of the global

G. Caligaris (✉)

Department of Economics and Administration,
National University of Quilmes and National Scientific and
Technical Research Council, Bernal, Buenos Aires, Argentina

process of capital accumulation, the chapter goes on to review some basic Marxian arguments about ground-rent that permit the identification of specific contradictions in the international economic relations established by such countries. On this point, the chapter brings to light a contrasting argument to those of a ‘dependency’ or ‘world systems’ perspective that explain this type of national economy on the basis of the existence of some kind of unequal exchange in their trading relations with other countries. Given that the concrete forms in which these contradictions are developed are mediated precisely through the national form of the process of capital accumulation, the chapter ends by examining the specificity of resource rich countries on the basis of the Argentine case.

THE GLOBAL ACCUMULATION OF CAPITAL
AND THE CLASSICAL INTERNATIONAL DIVISION OF LABOUR:
THE ‘GLOBAL CONTENT’ AND ‘NATIONAL FORM’
OF CAPITAL ACCUMULATION

*The Global Content and the National Form of Capital
Accumulation as Bases for the Explanation of the Specificity
of ‘Resource Rich’ Countries*

As is widely accepted by contemporary Marxist scholarship, Marx did not develop his critique of political economy by making generalisations based upon the particular characteristics of one national sphere but by departing from the capitalist system as the form of the organisation of social life (Pradella 2013). Consequently, in order to give an account of the particular characteristics of countries specialised in the production of raw materials, we have to systematically develop the determinations specific to such countries as concrete forms of the existence of (global) capital.

The plan that Marx had outlined for the exposition of the critique of political economy culminated, at least in his most ambitious versions, with a book on the ‘World Market’ (Marx 1981: 205, 1983: 270, 1987: 261, 1993: 108). Thus, from an early stage Marx considered capitalism to be a universal mode of production and, consequently, of a necessarily global character (Marx and Engels 1975: 49, 1992: 340–1). In this way the world market became for Marx the only place ‘in which production is posited as a totality together with all its moments’ (Marx 1993: 227), that is, the place where the total social capital (*gesellschaftliche Kapitals*) fully affirms itself

as the alienated subject of social production.¹ From this point of view, the ‘individual countries’ that are ‘integral parts’ of the ‘world market’ (Marx 1976: 702) are but aliquot parts of the total social capital, or rather, the particular forms it takes. It follows that the specifically capitalist character of the constitution of national states presupposes ‘the establishment of Modern Industry and of the world market’ (Marx and Engels 1976: 486), that is, it already presupposes the fully developed global essence of the capitalist mode of production. Considered thus, the process of the accumulation of capital, that is to say the movement of the total social capital as the immediate subject of the organisation of social life, can be defined—paraphrasing Marx—as a process which is global in substance or content, and national only in form (Marx and Engels 1976: 495).

Although this summary goes without saying for many Marx scholars, as some authors have recently noted (Iñigo Carrera 2013: 168 ff; Grinberg and Starosta 2014; Guevara 2011), precisely the opposite conception forms the basis of the great majority of ‘Marxist’ explanations of the relations established between distinct national spaces. In effect, each time the particular course adopted by the national accumulation of capital is explained as a result of local class struggle and/or impositions from another national sphere—to name the most common explanations among Marxists—it is presumed that each national sphere of accumulation is autonomously constituted and that the relation between them is established on the basis of this same autonomous constitution. Therefore, the global process of the accumulation of capital and its corresponding national differentiation does not emerge out of the immanent necessity of the movement of the total social capital but, conversely, emerges from the interaction between abstractly autonomous national processes of capital accumulation. However, from our point of view it follows that, if the process of capital accumulation is global in content and national in form, the course followed by each national sphere of the accumulation of capital and, therefore, by the national class struggle, has to be explained by the role the national sphere plays in the global unity of capital accumulation, whose synthesis is the world market (Grinberg and Starosta 2014: 240).

According to Wallerstein (1991: 590), in a ‘careful reading’ of the texts where Marx himself analyses the class struggle at the national level, ‘Marx repeatedly explains the different concrete political actions of the British and French bourgeoisies by the fact that they played different roles in the world market’. Although the degree to which Marx fully developed a systematic explanation of the class struggle in a particular national sphere can

be debated (Engels 1990: 506–7), and notwithstanding how ‘repeatedly’ an ‘explanation’ can be found in Marx, as Wallerstein suggests, it is certainly possible to find in those texts the ‘repeated’ observation about the need to explain national class struggle through the role the corresponding national sphere occupies in the world market. For example, in *The Class Struggle in France*, when discussing approaches that abstract from the global determination of national class struggles, Marx argues: ‘But French relations of production are conditioned (*bedingt*) by the foreign trade of France, by her position on the world market and the laws thereof’ (Marx 1978: 56).

From this point of view, class struggles and corresponding state policies are, therefore, the concrete forms that mediate the unity of the movement of the total social capital. As is acknowledged by various contemporary Marxist contributions, national states are political representatives of the total social capital (Clarke 1991; Holloway and Picciotto 1978). But since the total social capital is global in content and national in form, national states only represent total social capital through the representation of *national* total social capitals.² That is, in the same way as individual capitals behave as aliquot parts of the total social capital, national total social capitals behave as aliquot parts of the global total social capital. The determination of national states as political representatives of national total social capitals is nothing more, then, than the mediated determination of national states as political representatives of global total social capital. In the Marxist literature on the state, this point of view is captured by Clarke (2001: 79) in the following way:

Although the modern nation-state is constituted politically on a national basis, its class character is not defined in national terms ... [T]he subordination of the state to the rule of money and the law, which is the foundation of the constitutional form of the capitalist state, confines the state within limits imposed by the contradictory form of the accumulation of capital on a world scale. Consequently the national form of the capitalist state can be defined only as a condensation, or nodal point, of an international state system.

The course of the national sphere of the accumulation of capital can be explained neither by national political relations nor by the direct relations that are established between distinct national states—that is, their ‘international relations’. As with all the direct relations of the capitalist mode of production, international political relations are but the concrete form in

which indirect relations are realised, in this case, international economic relations, which are relations of competition established by individual capitals in the world market. Therefore, as with the political relations that are established within the national sphere, international political relations are mediated forms through which the global unity of capital accumulation is realised (Iñigo Carrera 2013: 145). As a consequence, it cannot be the basis of the explanation of the course adopted by a national process of capital accumulation. On the contrary, it is precisely this course, determined by the movement of the total global social capital, which explains the political relation that the national state establishes with other states.

In summary, this point of view contrasts strongly as much with interpretations that explain the form and the course adopted by a national economy through national political relations [perhaps the most common position in Marxist analysis, whose origin can be retraced to Engels (1990)], as with those that explain it through international political relations [a traditional position which goes back at least to Lenin (1964)]. Finally, it also contrasts with approaches that postulate a simultaneous determination of both national and international political relations [a similarly common and longstanding position that in recent decades has found a certain systematisation in Neo-Gramscian analyses, starting with Cox (1981)].

In reality, the explanation of national class struggles and international political relations by the place occupied by the national sphere in question within the global unity of capital accumulation, is not simply based on the recognition that capitalism is a global mode of production in content and national only in its form. It is based, fundamentally, on the recognition that capital is the dominant social relation and, as a consequence, all social relations are forms of its development. Definitively, it is based on the notion of capital being the concrete subject of the organisation of social life, since it is only from this point of view that political relations can be grasped as what they actually are, namely, concrete forms of the realisation of economic relations (Iñigo Carrera 2013: 95; Kicillof and Starosta 2007).

*The Classic International Division of Labour as a Constitutive
Part of the Current International Division of Labour*

To account for the particular character of a national sphere of accumulation of capital we must, therefore, proceed from the immanent necessity

of the global process of accumulation to differentiate itself into different national spheres. And this necessity can only spring out of the movement of the total social capital as the concrete subject of the organisation of social production. As is known, the *motor primus* of this movement is the production of relative surplus-value, which must therefore constitute the specific point of departure for the explanation of the role that each national sphere plays in the global unity of the accumulation of capital. More precisely, it concerns the development of the international division of labour that emerges from the materiality of the labour process belonging to the production of relative surplus-value. As we have seen, Marx did not manage to address the concrete forms in which the said unity of the global accumulation process is established through the world market. However, he did manage to show that this global unity and its corresponding national differentiation emerge out of the process of the production of relative surplus-value itself. More specifically, he located the basis of the polarisation of the world market in the most potent form of the development of this process, which is large-scale industry:

[A]s soon as the factory system has attained a reasonable space to exist in, and reached a definite degree of maturity ... as soon as the general conditions of production appropriate to large-scale industry have been established, this mode of production acquires an elasticity, a capacity for sudden extension by leaps and bounds, which comes up against no barriers but those presented by the availability of raw materials and the extent of sales outlets ... A new and international division of labour springs up, one suited to the requirements of the main industrial countries, and it converts one part of the globe into a chiefly agricultural field of production for supplying the other part, which remains a pre-eminently industrial field. (Marx 1976: 579–80)³

That which Marx terms a ‘new and international division of labour’ appears to contrast with that which is currently also known as the ‘new international division of labour’ (NIDL) developed from the decades of the 1960s and 1970s (Fröbel et al. 1980), and whose basis is the ‘transnational reorganisation of production ... through the relocation ... to new industrial sites where labour-power is cheap to buy, abundant and well-disciplined’ (p. 15). However, as Grinberg and Starosta have noted, the course of historical development shows that the, so-called, NIDL did not result in the straightforward negation of the classical division of labour

(CIDL), but rather includes it as part of its substance (Grinberg and Starosta 2014: 241). In other words, one can currently find that within the NIDL there still are various countries that maintain their traditional role as producers of raw materials for the world market (Iñigo Carrera 2013: 65, 144 ff.). In this sense, Marx's cited text does not only retain validity but also, above all, confronts us directly with a question about the specificity of those national spheres of accumulation of capital that are based on the production of raw materials. What role do these national spheres play in the world market as the expression of the unity of the movement of global total social capital?

GROUND-RENT AND 'RESOURCE RICH' COUNTRIES IN THE GLOBAL UNITY OF CAPITAL ACCUMULATION

The Loss of Surplus-Value by the Total Social Capital in the Form of Ground-Rent

The constitution of a national sphere based on the production of raw materials for the world market only makes sense to the extent that these raw materials are cheaper than if they were produced directly in the countries in which there is a demand. Furthermore, to the extent that these raw materials are commodities of agrarian or mining origin, this relative cheapness springs from the existence of relatively favourable natural conditions in the country that produces them. Ultimately, from the point of view of the global unity of the accumulation of capital, the constitution of a national sphere of this type only makes sense if the cheapening of the commodities that it supplies results in a lower value of labour-power exploited by the entire global total social capital, and in a growth in the corresponding rate of surplus-value.

However, the question is not as straightforward as it first appears. In contrast to common commodities, raw materials are normally bearers of a surplus-profit existing in the form of ground-rent, and the greater the relative favourability of the natural conditions in which they are produced, the greater the surplus-profit is. Consequently, the generation of national spheres specialised in the production of raw materials also implies the permanent transfer of a portion of global social surplus-value to landlords. As Grinberg and Starosta (2014: 241–2) argue, 'if, on the one hand, the total social capital enhanced its valorisation by reducing the value of labour-

power, on the other this was partly offset by the drain of surplus-value, otherwise available for capital's appropriation, flowing into the pockets of domestic landowners in the form of ground rent'.

The question that arises at this point is, what is the origin of the surplus-value that constitutes ground-rent? From the point of view of the global accumulation of capital, if the surplus-value in question were the product of the labour of workers who produce raw materials, the generation of this type of national sphere would simply imply the failure to appropriate a part of the newly created surplus-value. However, if it did not concern the product of these workers' labour, it would imply the actual *loss* of a part of surplus-value that was appropriated before the existence of such national spheres. In this last case, the constitution of countries specialised in the production of raw materials would represent a greater contradiction for the global total social capital.

The question of the origin of surplus-value that constitutes ground-rent has been widely debated within Marxist scholarship. In essence, it is possible to distinguish two positions. On the one hand, some scholars consider that ground-rent—whether differential, absolute, or monopoly⁴—is surplus-value produced *within* the sector that produces raw materials. On the other hand, other authors argue that, with the exception of absolute rent, all forms of rent are constituted by surplus-value originating from *outside* the sector that produces raw materials. The first of these positions has been fundamentally developed by the Soviet tradition under the argument that the surplus-value that constitutes ground-rent emerges from the greater productivity of labour that produces the raw materials in question (Lapidus and Ostrovitianov 1929: 279; USSR Academy of Sciences 1957: 222–3; Vygodskii 1974: 101). As I have argued elsewhere, the problem with this argument—and therefore with this position—is that it openly contradicts the most basic Marxian argument about value, according to which growth in the productivity of labour does not result in an increase in value, but in the growth of the quantity of use-values produced (Caligaris 2014a: 67). In contrast, the second of these positions, fundamentally developed in the 1970s by the Latin American Marxist tradition (Bartra 1979; Laclau 1969; Margulis 1979), argues that it is precisely because the labour that produces the raw materials in question is relatively more productive than the labour which determines their market price that the value that constitutes ground-rent has to be generated in another sector of social production. As was noted by the original contributors in this latter tradition, it concerns the same argument that Marx

carefully developed in his examination of ground-rent and which led him to consider this portion of surplus-value to be 'a false social value [which] results from the law of market value to which agricultural products are subjected' (Marx 1981: 799).

Naturally, this essential determination of ground-rent does not change because a national border stands between the landlord and the industrial capitalist. Therefore, the ground-rent that is carried within raw materials exported from 'resource rich countries' is constituted by the surplus-value produced by foreign workers. As was argued early on by Laclau (1969: 294, author's translation), this ground-rent 'is surplus-value produced by the foreign worker which flows into the country' supplying the raw materials. This means that the constitution of a national sphere specialised in the production of raw materials not only implies the cheapening of the labour-power consumed by industrial capital in general, but also that a mass of surplus-value which has not been generated therein flows permanently toward the national sphere in question. Such is the conclusion that follows from the worldwide development of the 'law of value', which is to say, from the movement of the global total social capital. Thus, this determination must constitute the point of departure for the entire explanation of the specificity of this type of national sphere of capital accumulation.

This conclusion openly contradicts all explanations of the specificity of the national economies in question based on analyses that posit the existence of a flow of surplus-value in an inverse direction, that is, on the existence of an outflow of surplus-value towards other countries, more specifically, toward those (mis-)termed 'developed', 'core', or 'imperialist' (for example, Emmanuel 1972; Marini 1991). Consequently, just as we discounted those explanations that were founded on the course of national class struggle or on international political relations, here we must also reject this other type of explanation that, even if not founded directly on the course of international political relations, is based on the existence of economic relations that contradict the essential determinations of ground-rent and, therefore, the law of value.

To conclude that a permanent mass of surplus-value produced by foreign workers flows toward the countries specialised in the production of raw materials would seem to contradict all the appearances presented by these national processes of capital accumulation. In effect, what would have to be expected in a country toward which there permanently flows an extraordinary mass of social wealth from abroad is a multiplied potential for the development of its national process of capital accumulation. Yet,

what these countries normally present is a situation of recurrent crises, a permanently lower productivity of labour, low wages, an unusually large and historically growing surplus population, and so on.

*The Potential for the Total Social Capital to Recover Part
of the Surplus-Value Lost as Ground-Rent*

Instead of abandoning the conclusion arrived at by the systematic development of the determinations of capital because it would appear to contradict immediate appearances, the path that the method of the critique of political economy opens up is precisely to continue developing such determinations. Therefore, what now has to be examined is how the release of surplus-value to the raw-material producing countries on the part of global total social capital transforms into its opposite, that is, into the *recovery* of this surplus-value.

First of all, the possibility of the recovery of lost surplus-value initially pocketed by landowners lies in the particular nature of the revenue that constitutes ground-rent. This form of revenue reproduces a social subject that plays no role in the immediate process of production, so that the appropriation of that part of the revenue by third parties does not affect the reproduction process in its unity. As Marx puts it:

The capitalist is the direct exploiter of the workers, not only the direct appropriator but the direct creator of surplus-labour ... he is himself a functionary of this production, its director. The landlord, on the other hand, has a claim—through landed property ...—which enables him to pocket a part of this surplus-labour or surplus-value, to whose direction and creation he contributes nothing. Where there is a conflict, therefore, the capitalist regards him as a mere superfetation, a Sybarite excrescence, a parasite on capitalist production, the louse that sits upon him. (Marx 1989a: 539)

In effect, if the *normal profit* of capital is affected, the reproduction of capital is compromised and, with it, the process of production it puts in motion. Similarly, if the labourer's *normal wage* is affected it compromises her capacity to work, and therefore her capacity to produce surplus-value, obliging capital to interrupt the process of production. By contrast, nothing happens if the landlord's *normal ground-rent* is affected. It would seem that the total social capital has no other option but to get rid of the landowning class, taking directly into its hands the exercise of monopoly

over the land, or rather, converting private property of the land into state property, so as to not have to cede to this parasitical class a part of the surplus-value generated by its own workers. This is precisely as Marx presents it:

The abolition of landed property in the Ricardian sense, that is, its conversion into State property so that rent is paid to the State instead of to the landlord, is the ideal, the heart's desire, which springs from the deepest, inmost essence of capital. (Marx 1989b: 470)

However, the abolition of private property for a means of production as significant as the land cannot be realised without calling into question the private property for the rest of the means of production and private property in general. Thus considered, it would appear that the total social capital has no option but to live with the landowning class and, therefore, to cede to it all surplus-value corresponding to the form of ground-rent. Marx also underlines this point:

The radical bourgeois ... therefore goes forward theoretically to a refutation of the private ownership of the land, which, in the form of state property, he would like to turn into the *common property* of the bourgeois class, of capital. But in practice he lacks the courage, since an attack on one form of property—a form of the private ownership of a condition of labour—might cast considerable doubts on the other form. (Marx 1989a: 278)

The recovery by the total social capital of the surplus-value produced by its workers but which ends up in the hands of landlords in the form of ground-rent contains, then, a contradiction. On the one hand, a recovery could be possible insofar as landlords are mere social parasites and, therefore, useless for the entire process of the accumulation of capital; on the other hand, doing away with landlords would imply jeopardising private property of the land and, along with it, the very process of capital accumulation. Marx presents the development of his contradiction in the following way:

Capital cannot abolish landed property. But by converting it into rent [which is paid to the State] the capitalists as a *class* appropriate it and use it to defray their State expenses, thus appropriating in a roundabout way what cannot be retained directly. (Marx 1989b: 470)

In summary, insofar as ground-rent is a mass of value that the landlord appropriates only by virtue of the economic relation she personifies, the total social capital can appropriate from her through the power of the state. However, precisely because ground-rent is revenue accruing to the private property of land, this appropriation is quantitatively limited by the very questioning of private property that it entails.

Now, the total social capital that Marx develops is, in reality, the global total social capital. For its part, the political representation of the global total social capital by the state is mediated by the national form taken by the accumulation process, that is, by the existence of national total social capital as an aliquot part of the global total social capital. Therefore, the appropriation of ground-rent by the total social capital through the state must take shape, first of all, in the appropriation of ground-rent by the national total social capital of ‘resource rich’ countries through their own national states.

THE CONCRETE FORM THROUGH WHICH GROUND-RENT ACCRUES TO THE NATIONAL LANDLORD CLASS AND THE LIMITS TO A PROCESS OF CAPITAL ACCUMULATION BASED ON THE PRODUCTION OF RAW MATERIALS: THE CASE OF ARGENTINA

Since it is mediated by the national form taken by capital accumulation, the question of the global total social capital’s recovery of ground-rent flowing into ‘resource rich’ countries can only be developed by examining a particular national case. Iñigo Carrera (1999, 2006, 2007) has taken on this task in the case of Argentina.⁵ In what follows, I offer a sketch of the Argentinean case to illustrate the concrete forms that the appropriation of ground rent flowing into ‘resource rich’ countries can take and, in turn, by the specific form such countries take by virtue of such forms of appropriation. Unless indicated, this brief account is based on the work of Iñigo Carrera.

The Forms Taken by the Recovery of Ground-Rent

A first form of recovering ground-rent is through direct taxation, that is, straight out of the landowner’s pocket. This form was attempted in Argentina in 1973 under the tax on potential ground-rent (*Impuesto a la*

Renta Normal Potencial de la Tierra), but it has never been applied effectively (Nuñez Miñana 1985).⁶ The reason for its ineffective application is not to be found in the abstract political power of the landowning class, but in the ‘confiscatory’ character, or the violation of the principle of fiscal equity, that this tax would entail given the mass of value at stake (Iñigo Carrera 2007: 120). In particular, given the natural differences between lands, this confiscatory character would represent a violent fiscal inequity that would divide the landowning class. But also, and fundamentally, it would affront the entirety of capital. For this reason, as Marx would say, this tax could not but remain merely the heart’s desire of the Argentine and foreign capitalist class.

A second form of taking ground-rent from the landowner is to impose a general tax, not on the value captured by each particular landowner, but on the commodities that are bearers of ground-rent. The fact that this tax is applied, in the last instance, to the portion of ground-rent materialised in the commodity and not to constant capital, variable capital, or the profit materialised in the commodity itself, is explained with reference to the nature of the revenue that ground-rent constitutes. If the tax is imposed on capital, whatever its part, it would directly affect the material production of the commodities in question and, in the end, the very collection of the tax imposed. On the other hand, if ground-rent is affected, material production continues as normal. This tax has appeared time and again in Argentinean history in the case of agrarian commodities destined for export. However, the amount of this tax has always been limited with respect to the amount of ground-rent in circulation (Iñigo Carrera 2007: 88–90). In effect, beyond a certain magnitude, it also appears to have a confiscatory character and/or to be in violation of fiscal equity. In spite of this, and in contrast with the tax on potential ground-rent, this type of tax constitutes a real form of the appropriation of ground-rent.

The effect of taxes on exports does not end, however, with the commodities on which they are directly applied. Through the mediation of competition, the taxes on commodities destined for the world market reduce the price for the same type of commodities destined for the domestic market. Whomever purchases these cheapened commodities domestically, therefore, are themselves appropriating a mass of ground-rent in the same way as the state when it collects the tax on the raw materials being exported (Iñigo Carrera 2007: 20). Nevertheless, neither the working class that consumes these commodities nor the state are the end beneficiaries of this appropriation. Instead, and insofar as those commodities are usually

‘wage goods’, the end beneficiaries are generally individual capitals that end up purchasing labour-power more cheaply without affecting the latter’s reproduction.

A third form of appropriating ground-rent from the landlord is to directly regulate the internal prices of raw materials. The same mechanism operates here as the application of a tax on exports. Consumers (that is, wage workers) pay a market price for the commodities in question that is less than the normal price, thus cheapening labour-power and thereby transferring a part of the ground-rent contained within them to its buyers (that is, individual capitals). The forms of regulation the state can bring to bear on internal prices are varied. In Argentina, the fixing of maximum prices for certain commodities and the existence of export quotas has predominated. However, the most potent form of this appropriation has been during brief periods in which the state directly purchased ground-rent bearing commodities at lower market prices than normal prices, in order to sell them later at a higher level. In this case the state enacts a direct appropriation of ground-rent, that is, without the mediation of individual or productive consumption that occurs under the other types of regulation of internal prices (Iñigo Carrera 2007: 88–90). Evidently, this form of appropriation of ground-rent entails the same limits carried by export taxes. As soon as a certain threshold of the rate of taxation is reached, its confiscatory character or the fiscal inequity involved becomes apparent. For this reason, the appropriation of ground-rent through the direct regulation of the prices of raw materials has been a relatively small proportion of the total mass of ground-rent available for capture. Moreover, its implementation has alternated with the application of export taxes.

Until now it would appear that, given the contradiction between the capturing of ground-rent from the landowner and the right to private property, the global total social capital could only recover a very limited portion of the ground-rent in question. However, there exists a mechanism of recuperation that, because of its veiled and also indirect character, manages to escape this contradiction and therefore allows for the recovery of ground-rent some way beyond the forms recently analysed. It concerns the overvaluation of the national currency in relation to the currency that functions as world money—historically, the US dollar (Iñigo Carrera 2007: 19). Because of its potency, this mechanism has been a constant in the history of the Argentine process of capital accumulation and is what explains its specific character. Before analysing it, and in order to give a clearer idea of its importance, note in Fig. 3.1 the magnitude and recur-

rence with which it appears in the course of the historical development of the Argentine national process of capital accumulation.

The overvaluation of the national currency means that whomever exchanges foreign currency for national money receives a lesser quantity of social wealth than they would receive if this type of exchange were at parity. To the extent that foreign currency enters the country by means of exports, the overvaluation of the local currency means that capitals that export must possess a surplus-profit that can be lost in the process of exchange without affecting their normal reproduction. In countries specialised in the production of raw materials this extraordinary profit is nothing but the ground-rent carried in agrarian and mineral commodities that are being exported.

The destination of the ground-rent retained in the foreign exchange mediation is varied, but two immediately appear. In the first place, the said ground-rent can end up in the pockets of importers that, due to the same currency overvaluation, need to pay out a lesser quantity of social wealth in order to acquire the foreign money with which they buy imported commodities. In the second place, it can end up in the hands of the state through extraordinary taxes on imports that compensate for the effect of the overvaluation of the national currency by raising the prices of imports to their normal price.



Fig. 3.1 Overvaluation of national currency, Argentina (1882–2014)

Source: Iñigo Carrera (2007), updated to 2014 on the same methodological basis

As in the case of export taxes, the effect on the prices of raw materials that are exported provoked by the overvaluation of the currency is automatically transferred to the same commodities that are consumed internally, so that the overvaluation also indirectly opens another route for the transfer of ground-rent. The appropriators in the first instance are the consumers of these commodities, although they are evidently not the final beneficiaries.

*The Appropriation of Ground-Rent by the Total Social Capital
and the Limits to a National Process of Accumulation Specialised
in the Production of Raw Materials*

Until now we have considered the historically most relevant mechanisms that, mediated by the political action of the national state as direct general representative of the global total social capital, have been developed so as to recover ground-rent from Argentine landlords. The question that remains is what the global total social capital has done to finally appropriate it for itself? Before answering this, or rather, as the first step in a response, we consider how the global total social capital presently acts in the Argentine national process—that is, how the capital that accumulates in this national space of valorisation acts, as a whole, and as an aliquot part of the global total social capital.

At first glance, it would seem that the global total social capital behaves in Argentina as it does in any of its other national forms. First of all, it is clear that a good part of the capital in question is of foreign origin. However, in contradistinction to the rest of the world, what characterises the foreign capital that accumulates in this country is that it produces on a scale restricted to the domestic market (see also Chap. 8). Indeed, if we take into account the degree and the historical recurrence of the overvaluation of the national currency, this characteristic should come as no surprise: insofar as the commodities produced by those capitals do not yield a permanent source of extraordinary profit, the existence of an overvalued currency prevents them from being exported without affecting the normal reproduction of capital. What does spring to attention, on the other hand, is the question of how it is possible to reproduce those normal capitals in as small an internal market as that of Argentina. Iñigo Carrera makes this clear in the case of the automotive industry:

How do they fit into a market of only 36 million inhabitants, almost half of whom live below the poverty line today and whose average wage is just one tenth of the American wage? For instance, six of the world's main car manufacturers still have production plants in Argentina. Each export to the Mercosur zone is met by an import, thus balancing out any expansion of the scale of production, beyond that of the internal market. Conversely, in Italy, with a population that is two thirds larger and an average wage close to the American one, there is only one car manufacturer which is, furthermore, unable to sustain independent capital ownership. (Iñigo Carrera 2006: 193)

In effect, to produce exclusively for an internal market like that of Argentina means to produce on a small scale and, as a consequence, to produce with higher costs. In this context, to yield a normal rate of profit it is necessary to depend upon an alternative source of surplus-value that compensates for those higher production costs. Of course, one such source can be the circumstantial purchasing of labour-power below its value. Another can be the surplus-value released by small capitals that are linked together with the 'foreign' capitals in circulation (that is, in 'global value chains'—see Starosta 2010). But neither of those two phenomena can be the basis of the normal accumulation of capital in Argentina. If that were the case, instead of limiting themselves to the internal market, industrial capitals would basically produce for the world market (Iñigo Carrera 2006: 194). In fact, the essential source of surplus-value that compensates for the higher costs incurred by normal capitals is nothing other than the ground-rent that they capture from landlords through the mechanisms analysed above.

The normal capitals that accumulate in Argentina appropriate this ground-rent in various ways. The most significant are the following. To the extent that this rent falls directly into the hands of the national state—via taxes on exports, direct control of foreign trade, or taxes on imports that compensate for the overvaluation of local currency—it flows toward the capitals in question through subsidies, tax exemptions, the purchasing of their commodities, and so on. To the extent that ground-rent falls into the hands of the working class through the purchasing of agrarian commodities cheapened by the effect of taxes on exports or the overvaluation of the local currency, it is automatically transferred to capital in the form of a cheapening of the value of labour-power. To the extent that ground-rent is retained in the foreign exchange mediation by the overvaluation of the local currency, it is appropriated by capital through the

purchase of cheapened imported means of production or the multiplication of the remission of its profits abroad.

In its unity, however, this appropriation of ground-rent by the global total social capital, in particular that which develops through the accumulation of normal capital, contains an insuperable contradiction. On the one hand, the overvaluation of the local currency, given its indirect and veiled character, is the only form in which a sufficiently compensatory quantity of ground-rent can be appropriated. On the other hand, this same form restricts the accumulation of normal capital to the internal market and therefore, given the size of this market, means the restriction of its scale of production. The result is a process in which global total social capital succeeds in appropriating ground-rent but, at the same time, does so at the expense of limiting the national process of accumulation in question. Thus, normal capitals that accumulate in this kind of country are limited by the quantity of available ground-rent that compensates for the difference between their scales of production and those that prevail on the world market, which are constantly increasing in scale. Meanwhile, the working population continues to grow and to swell the ranks of the superfluous population.

In summary, looking at the case of Argentina one can conclude, first, that the potentiality for the global total social capital to recuperate the surplus-value that flows toward resource rich countries in the form of ground-rent takes a whole series of possible concrete forms of realisation. And, second, that the nature of these forms of recuperation necessarily generates a limit to the expansion of the process of capital accumulation in the country in question.

CONCLUSION

This chapter has sought to offer a general explanation of the distinctive characteristics presented by countries specialised in the production of raw materials that does not contradict the fundamentals of the Marxian critique of political economy. With this methodological approach, the point of departure has been to recuperate the Marxian perspective according to which the process of capital accumulation that regulates our lives is essentially global and that, therefore, all national specificity has to be explained by the role that the country plays in correspondence with the global unity of the accumulation of capital. This viewpoint plainly contradicts any explanation based on the struggle of local classes, in international political

relations, or in the conjunction of both. More specifically, these relations are nothing more than the mediating forms through which the movement of the global total social capital realises itself as the concrete subject of the organisation of social life.

By recognising that countries specialised in the production of raw materials are *organs* of the global process of capital accumulation, we have acknowledged that international economic relations are essential in explaining the specificity of raw-material producing countries. However, in contraposition to the theories that encounter in these economic relations some type of unequal exchange against 'resource rich' or 'peripheral' countries, we have seen that what concretely occurs in international trade is entirely to the contrary, that is, it is the 'resource rich' countries that receive a flow of the global social surplus-value not originally produced by them, in the form of ground-rent. The examination of the particular nature of the revenue constituted by ground-rent has confronted us with the potentiality for the global total social capital to recuperate part of the surplus-value lost in the purchasing of raw materials through the mediation of policies applied by the national states of the 'resource rich' countries. The Argentine case has shown that this potentiality is realised in a whole series of concrete forms. More importantly still, this case also demonstrates that, given their nature, these forms of recuperation of ground-rent generate the existence of a specific limit to the expansion of the process of capital accumulation in this type of countries, that which is consistent with the conditions of impoverishment normally evident therein. Of course, the conclusions drawn from the analysis of the Argentine case cannot be generalised in a mechanical and automatic manner to any country specialised in the production of raw materials. On the contrary, every case has to be examined in its specificity. In this sense, the objective of this chapter has been merely to set out a basis for carrying out this type of research.

NOTES

1. The term 'total social capital' is the usual English translation of what Marx variously terms '*gesamte gesellschaftliche Kapital*', '*gesellschaftlichen Gesamtkapitals*', or simply '*gesellschaftliche Kapitals*' in the original German.
2. The consideration of a national space of valorisation as an organic element of the worldwide accumulation process requires that we go beyond Marx and explicitly distinguish between the total social capital as the unity of all individual capitals and, in a more limited sense, as the unity of all individual

capitals that function within a national territory. In line with the Marxian terminology, I shall refer to the former as the *global total social capital* and to the latter as the *national total social capital*. Note, however, that national in the latter term does not refer to the nationality of the owners of capital but to the fact that this part of capital is valorised within the respective national territory.

3. In line with his systematic presentation of the determinations of capital as the dominant social relation, Marx was conscious of the fact that the explanation of the global unity of the accumulation of capital would not correspond to the planned book on 'the process of the production of capital' but, as noted earlier, to the book on the 'world market'. For this reason, Marx precedes this development by clarifying that he will refer 'to relations of a purely practical nature, the existence of which has not yet been revealed by our theoretical presentation' (Marx 1976: 578). This affirmation by Marx contrasts strongly with the interpretation proposed by Pradella (2013), who sees *Capital* as a systematic development of international relations.
4. Traditional readings distinguish three types of ground-rent: differential rent of types I and II that arise out of differences in fertility and/or the location of lands; and the absolute rent that emerges from the lower organic composition of capital invested in the worst land (Kautsky 1988). More recent readings have further distinguished the simple monopoly rent that emerges from the market power of the landlord class (Harvey 1973). Of course, this typology, as well as the definition of each type of ground-rent, is not free from controversy. For a synthesis of main debates, see Caligaris (2014a, b).
5. For an analysis of Brazil on this basis, see Grinberg (2008, 2011, 2013).
6. The first official draft of a tax on potential ground-rent was developed in the early 1960s. After several public discussions, in 1973 the tax obtained the status of national law (Law No. 20,538/73). However, this tax was never fully applied because the surveying and cadastral valuation of lands the law demanded were not carried out. For more information see Nuñez Miñana (1985).

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Revisiting the New International Division of Labour Thesis

Guido Starosta

Despite being highly influential during the first half of the 1980s, the new international division of labour (NIDL) thesis advanced by Fröbel et al. (1980) seemed to fall out of favour in the 1990s. Prompted principally by some empirical developments which seemed to contradict the major claims of the NIDL thesis (especially the industrial upgrading of the first generation of ‘Asian Tigers’, which would eventually include relatively complex, ‘capital-intensive’ sectors rather than simply unskilled-labour-intensive ones, as predicted by Fröbel, Heinrichs and Kreye), many scholars then started to voice strong reservations about the NIDL approach. While many of these objections uncovered real weaknesses in the NIDL thesis, I argue that the critics’ alternative explanations were not free from shortcomings themselves, and that debates on late-industrialisation eventually threw the baby out with the bath water. I show that many of those critiques were misguided and that there still is much of value to be recovered from the original insights contained in Fröbel, Heinrichs and Kreye’s contribution for a critical approach to the contemporary dynamics of the international division of labour.

G. Starosta (✉)

Department of Economics and Administration,
National University of Quilmes and National Scientific and
Technical Research Council, Buenos Aires, Argentina

The goal of this chapter is therefore to offer a critical reformulation of the NIDL thesis which preserves its rational kernel yet abandons its most contentious points. I argue that the former resides in its global perspective on capital accumulation and in the centrality attributed to recent material transformations in the capitalist labour process as key to the explanation of the developmental potentialities of late-industrialisation. The latter relate to weaknesses in Fröbel, Heinrichs and Kreye's conceptualisation of the changing material configuration of the production process in capitalism, and to their inability to offer a firmly grounded explanation for the resilience of the classical international division of labour (CIDL) in certain regions of the world (for instance, Latin America—see Chaps. 2, 3 and 5). On this basis, this chapter further submits that a revised NIDL thesis can shed new light on the specificities of 'export-led industrialisation' in the 'Third World', especially on East Asian developmental processes.

THE NEW INTERNATIONAL DIVISION OF LABOUR DEBATE

Before reviewing the debates that emerged around Fröbel, Heinrichs and Kreye's work in the 1970s, it is worth briefly summarising the general thrust of the argument normally attributed to it. The popularised version of the NIDL thesis on the process of global restructuring argues that, faced with declining profitability in advanced capitalist countries (mainly due to rising wages), transnational corporations (TNCs) started to relocate labour-intensive manufacturing to the, then so-called, Third World, thus acting as a major factor in the industrial decline that seemed to prevail in the former countries in the late 1970s and early 1980s. Third World countries, for their part, provided TNCs with a huge potential reserve of cheap and disciplined labour-power. Combined with technological advances in the means of communication and transport, the increasing fragmentation of production processes and the consequent simplification of semi-skilled and unskilled tasks together created a tendency for the establishment of export-oriented world market factories in the Third World. Accordingly, the 'classical' international division of labour (CIDL)—revolving around the polarisation of the world economy into an industrialised 'core' and a dependent 'periphery' confined to the role of supplier of raw materials and staple foods—had been superseded by the NIDL, with an industrialised but still dependent Third World, and a 'First World' oriented to a service-based economy, which could not absorb the resulting unemployed population.

A first point made by several critics of this NIDL thesis has been that TNC competitive strategies have not been reduced to the search for world-market production sites based on cheap and compliant labour-power. This excessive emphasis on cost minimisation and the supply of ‘factors of production’ ignores that corporations also consider revenue maximisation and output markets when making decisions on the geographical location of production (Schoenberger 1989: 92). In this sense, the NIDL thesis allegedly overlooked that, in certain regions of the ‘developing’ world, foreign direct investment (FDI) in the last thirty to forty years has been driven to take advantage of profitable domestic markets (for instance, in sectors like the automotive and chemical industries) (Fagan and Webber 1999: 38; Jenkins 1984). Moreover, TNCs have continued to invest in new raw material ventures and agribusiness.

Despite much emphasis by critics on this point, Fröbel, Heinrichs and Kreye were aware of this. Indeed, they acknowledged that the emergence of the NIDL ‘does not mean that capital no longer exploits the possible benefits of production in countries whose local market is protected’ (Fröbel 1982: 511). It was also clear to them that the establishment of world market factories did not imply that investment in the production of agricultural and mineral raw materials (including its processed derivatives, as in agribusiness), which take advantage of privileged non-reproducible natural conditions like exceptional fertility of the soil, would necessarily come to a halt (Fröbel 1982: 512). Presumably, their argumentative strategy was to highlight the *novel* developmental *tendencies* of global accumulation, with the awareness that ‘the concretization, modification, or transcendence of this trends and tendencies through “local” particular circumstances will require further research’ (Fröbel 1982: 508).

And yet, it is fair to say that Fröbel, Heinrichs and Kreye *did* underestimate the resilience of the CIDL and tended to overgeneralise the potentialities of those newer developmental tendencies in the geography of global capitalism. For instance, their empirical study included evidence from Brazil as an example of the incipient establishment of world-market factories (Fröbel et al. 1980: 304ff.). However, Brazil is one of the most paradigmatic cases (alongside Argentina) of precisely the opposite tendency: *the persistence of the CIDL* and its enduring (albeit decreasing) potentiality to sustain industrialisation processes oriented towards protected domestic (or regional, that is Mercosur) markets in ‘peripheral’ countries (Iñigo Carrera 2007; Grinberg 2008). The truth of the matter is that the emergence and development of the NIDL did not entail overcoming the

CIDL. Both modalities coexist in the contemporary configuration of the world market, which leads to a more complex form through which the formal/material unity of the global accumulation process is achieved. This is a crucial insight, already advanced by Iñigo Carrera and Caligaris in Chaps. 2 and 3.¹

Critics have further argued that the NIDL thesis also erred in its prognosis of the fate of the accumulation process in the 'First World'. In effect, the strong claims for the tendency to de-industrialisation of the former heartlands of capitalism were too heavily reliant on very specific assumptions about the evolution of the production process being one of a fragmentation of tasks and the deskilling and standardisation of products (Schoenberger 1988; Sayer 1986). However, restructuring in advanced national spaces of accumulation through the further automation of the labour process was an alternative strategy that TNCs have actually pursued together with the relocation of production (Schoenberger 1988, 1989). In other words, manufacturing could be 'relocated back north' (Cho 1985; Nanda 2000; Oberhauser 1990).

Inasmuch as Fröbel and his colleagues did one-sidedly emphasise the transformative dynamics in the 'global south' without shedding much light on the kind of mutations undergone by advanced capitalist countries, those critiques rightly uncovered one of the central limitations of the original formulation of the NIDL thesis. However, the particular arguments put forward did not rest on very solid foundations either. As the empirical discussion of the evolution of the Brazilian and South Korean steel industries by Grinberg in Chap. 9 shows, for example, the greater 'capital-intensity' of more highly automated labour processes has not precluded their relocation to 'peripheral countries'. In this sense, the general validity of the NIDL thesis does not rest on any particular assumption about the 'capital-intensity' of the production process.² The key issue concerns the relative cheapness and discipline of certain kinds of labour-power, whether in manual assembly tasks *or* as machine-operators in a more automated labour process.³ What matters for the spatial implications of transformations in the capitalist labour process, is whether the production of workers with the varied qualities of labour-power required by the different tasks associated with an increasingly automated labour process, takes a shorter time, and therefore costs less, than before the introduction of technological change. Note that this point also applies to intellectual labour. Insofar as the latter also becomes *relatively* simplified, the exploitation of the consequently less complex forms of intellectual labour-power can also

be relocated to countries where capital finds those kinds of workers more cheaply and with a more compliant subjectivity, as the current literature on offshoring of innovation and creative labour illustrates (Ernst 2005; Huws 2006, 2014). Thus, we shall see that industrial upgrading and the concomitant increase in real wages in countries like South Korea, and hence the subsequent development of hierarchically-structured *regionalised* production networks (Hart Landsberg and Burkett 1998; Bernard and Ravenhill 1995), is perfectly consistent with the NIDL thesis, rather than its negation, as some critics tended to assume (for example, Fagan and Webber 1999; Henderson 1989).⁴

On the other hand, the renewed wave of international migration by workers and the dismantling of state policies supporting the relatively undifferentiated reproduction of the different segments of the working class (that is, the so-called welfare state) have meant that capital did not necessarily need to relocate to benefit from the advantages of the NIDL. It could also *recreate* the general content of the NIDL within its national territory by accentuating the differentiation of the conditions of exploitation and reproduction of labour-power of heterogeneous complexities through the superimposition of the formal mediation of citizenship (and/or through the reassertion of the formal mediations of race, ethnicity, and gender) (see also Chap. 7).⁵

Finally, an intimately related objection put forward by critics stated that the NIDL thesis overstressed the role of TNCs in shaping the contours of the world market and failed to acknowledge the ‘agency’ of indigenous firms from the ‘periphery’ (Fagan and Webber 1999: 39). I argue that it is grounded in both a misreading of Fröbel, Heinrichs and Kreye’s argument and, more importantly, in a misunderstanding of the actual determinant of the emergence of the NIDL, namely, the changing material conditions in *the process of valorisation of industrial capital on a global scale*. Irrespective of the ‘nationality’ of industrial capitals, this process, directly or indirectly, minimises the total cost of reproduction of the *global* working class and thus increases the rate of valorisation of global capital as a whole. The relevant question here is the spatial relocation of capital’s valorisation process as such, not that of individual capitalist firms.⁶ The emergence, consolidation, and even market leadership of ‘national champions’ from the ‘periphery’ (for example, the growth and industrial upgrading of Korean *chaebols*), has been as much an expression of the NIDL as world market-oriented FDI by TNCs. As Grinberg’s discussion of the Korean steelmaker POSCO in Chap. 9 demonstrates, the objective

basis of its global competitiveness and consequent success has been the same that attracted international investment by TNCs elsewhere in East Asia (or in other sectors of Korea), namely, the harsh exploitation of the domestic pool of relatively cheaper and more compliant wage-workers, which was in turn made possible by the prior material transformation of the steelmaking labour process that downgraded the requisite productive attributes of the respective collective labourer.

In sum, the global process of industrial restructuring has involved both automation-based technological change *and* spatial relocation. But these have not been mutually exclusive or contingently related competitive strategies pursued by TNCs, but different *forms* taken by the same intrinsically global *content*; the novel quality of the production of relative surplus-value on a world scale by *capital as a whole*. The next section further elaborates on this fundamental point.

A MARXIAN RE-EXAMINATION OF THE NEW INTERNATIONAL DIVISION OF LABOUR THESIS

One of the strengths of Fröbel, Heinrichs and Kreye's contribution, which sets it apart from most of their critics in the view of the contributors to this book, derives from an analysis that was firmly rooted in the essentially global nature of the capitalist valorisation process. In other words, the world market was not regarded simply as the sum total of national economies interconnected through external trade and capital flows. Instead, Fröbel, Heinrichs and Kreye conceived of national economies as 'organic elements of one all-embracing system, namely a world economy which is in fact a single world-wide capitalist system' (1980: 8). Furthermore, and following from the previous point, their approach did not consider nation-state policies as 'autonomous' forces that determine the specific structure of national markets and processes of capital accumulation. These were seen as *political mediations* of the integration, through the international division of labour, of the *intrinsically global economic content* of the process of capitalist development, whose 'determining force, the prime mover ... is therefore the valorisation and accumulation process of capital' (1980: 25). Accordingly, they rightly saw the emergence of the NIDL not as being *driven* by the deliberate strategies of states or of TNCs but, rather, as the 'unconscious' result of a qualitative change in the conditions of the autonomously regulated global process of capital accumulation.

The following passage from their book is eloquent and unequivocal in this respect, so it is worth quoting at length:

We therefore interpret the currently observable relocation of production in industry (both within the traditional ‘centre’ and towards the ‘periphery’), and in addition the increasing world-wide subdivision of the production process into separate partial processes as being the result of a qualitative change in the conditions for the valorisation and accumulation of capital, which is forcing the development of a new international division of labour. This new international division of labour is an ‘institutional’ innovation of capital itself, necessitated by changed conditions, and not the result of changed development strategies by individual countries or options freely decided upon by so-called multinational companies. It is a consequence and not a cause of these new conditions that various countries and companies have to tailor their policies and profit-maximising strategies to these new conditions (that is, to the requirements of the world market for industrial sites) (1980: 46).

Unfortunately, the general determinations behind this fundamental insight were insufficiently elaborated by Fröbel, Heinrichs and Kreye, thus opening the space for some of the misguided criticisms reviewed above. Moreover, the theoretical arguments that they did flesh out were based on a rather eclectic synthesis of Marxist and world-systems/dependency theory terminology that, in my view, did not contribute to the rigour and clarity of their discussion.⁷ Specifically, what was missing from their otherwise insightful work is therefore a more rigorous inquiry into the general nature of capital as a *fetishised social relation*.

One of the most potent scientific discoveries of Marx’s critique of political economy was that capital is neither a thing (for example, the instruments of production), nor a productive unit or legal entity (that is, a firm), nor a social grouping sharing common characteristics and interests (business elites). In its general determination as *self-valorising value*, capital is actually a *materialised* social relation between commodity-owners differentiated into social classes, which becomes inverted into the very (alienated) subject of the process of social reproduction in its unity (Marx 1976: 763). Thus, capital is essentially the formally boundless movement of self-expansion of the objectified general social relation between private and independent individuals which, in its own process, produces and reproduces the latter as members of antagonistic social classes (Marx 1976: 251–7, 1978: 185).⁸

Moreover, as an expression of this inherently self-expansive nature, this fetishised social relation is global in content or substance and national only in form (Iñigo Carrera 2013: 144–5; Marx 1993: 227–8). This means that it is ‘the self-valorisation of value’ on a global scale, or accumulation on the level of the ‘total social capital’, that constitutes the immanent end in the world market (Smith 2006: 193). The territorial or spatial dimension of the accumulation process—and the changing forms of the worldwide division of labour—therefore cannot be seen as *determined* by the locational strategies of TNCs faced with given qualitative national and regional differences, in turn seen as established by allegedly autonomous state policies. Instead, it needs to be grasped as an expression of the underlying formal and material unity of the essentially global contradictory dynamics accumulation of the total social capital, which are *economically mediated* by relations of competition among individual capitals like TNCs (again, as opposed to *determined*), on the one hand, and *politically mediated* by the policies of the nation-state on the other (Clarke 2001). As Burnham (1994) states against traditional Marxist theories of the global political economy, the immanent *content* of these global dynamics is not one of imperialism or dependency (that is, a direct political relation between states, another mediating *form*), but those of the production of (relative) surplus-value on a world scale (see also Howe 1981). In other words, the foundation of the uneven spatial differentiation of global capitalism must be searched for in the changing forms of the exploitation of the global working class by the total social capital through the transformation of the material forms of the capitalist production process. The latter is, in sum, the general economic content that is realised in the political form of state policies (domestic and foreign) and class conflict, albeit ‘behind the backs’ of the antagonistic actions of the personifications involved (social classes and their diverse political organisations, ‘political elites’ and/or ‘state managers’). These contradictory and crisis-ridden dynamics, which fundamentally entail a permanent revolution in the modes of exertion of the labour-power of individual workers and of their articulation as a directly collective productive body (Marx 1976: 617), lie at the heart of the contemporary forms of the international division of labour.

Here we find one of the central weaknesses in the original formulation of the NIDL thesis, for, as Grinberg (2011) perceptively notes, the foundation of the emergence of the NIDL does not reside in the intensification of the *manufacturing division of labour*, that is, in the ‘deskilling’ resulting from the ‘subdivision of the production process into elements’ (Fröbel

et al. 1980: 37ff). Instead, as Iñigo Carrera (2013) shows in his alternative account of the NIDL, it developed as an expression of the impact that the progress of the *automation* of capitalist *large-scale industry* had on the individual and collective productive subjectivity of the working class.⁹ More specifically, the constitution of the NIDL has been the result of the transformation of the modes of existence of the global collective labourer brought about by a leap forward in the process of computerisation and robotisation of the production processes of large-scale industry, especially since the microelectronics revolution. Let us examine these productive changes more closely.

As is a general tendency in large-scale industry, these transformations have revolved around a threefold qualitative differentiation in the evolution of the labour-power of the members of the collective worker. In the first place, they have involved the *expansion* of the productive attributes of those wage-labourers performing the more complex parts of the labour process, that is, all those forms of (mainly) intellectual and scientific labour which are required for a leap forward in the automation of the system of machinery, both through the computerisation of their calibration and control, and through the robotisation of assembly and machine feeding. This has not only included the expansion of the productive subjectivity of those wage-labourers responsible for the development of the power to regulate in an objective and increasingly universal fashion the movement of natural forces, that is science. It has also included the multiplication of the human capacity to incorporate science in the immediate process of production, both through its technological applications in the systems of machinery and through the conscious practical organisation of the unity of productive cooperation based *machinofacturing*. As Marx already anticipated in *Capital*, this development of the intellectual powers of humanity has taken on a separate existence vis-à-vis *direct* labourers in the immediate process of production, expressed in this context both in the growing importance of R&D labour and in the expansion of white-collar work involved in the programming of machine-tools and the planning of large-scale industrial production (as the latter activities became increasingly removed from the shop-floor). Yet, sooner or later many of these intellectual dimensions of living labour have also been subjected to the development of automation (or codification of knowledge) and therefore relatively simplified (e.g. the case of computer-aided design).

In the second place, these novel technological forms entailed a further step in the expulsion of the intervention of the human hand and of the

experienced-based practical knowledge of workers in the labour-process vis-à-vis the forms that dominated the previous historical cycle of accumulation. Indeed, these productive changes have accelerated the codification of *tacit* knowledge, previously embodied in the manual industrial worker and largely acquired through lengthy on-the-job, learning-by-doing processes. Once codified, this knowledge has been objectified as an attribute of the system of machinery (Balconi 2002; Huws 2006, 2014). In this sense, the tendency has been one of deskilling or degradation of direct production work, although not as a result of the furthering of the manufacturing division of labour, as Fröbel et al. would have it, but through the objectification of formerly manual tasks as automated functions of machines. Now, this implementation of computer-based automation has also involved, alongside the redundancy of *old* skills, the creation of *new* ones, not only in the cases of laboratory and office work mentioned above, but also on the shop-floor. Thus, the effect of increasing automation on the productive subjectivity of direct production workers has not just been one of deskilling, but has been mixed, also entailing a certain up-skilling. However, the crucial point here, often missed in the debates on the impact of, so-called, flexible technologies, is that these newly emerging productive attributes have been of a *different kind* from those that had been lost. While the overall result has been a tendency for the degradation of those *particularistic* productive attributes (both manual and intellectual) which can only be slowly developed through the practical experience of machining in the direct process of production, many of the newly created skills—from familiarity with computers to flexibility or individual initiative in problem-solving or decision-making—have tended to revolve around the *universalistic* dimension of the productive quality of labour-power (so-called soft or generic skills; see Ramioul 2006), whose development is achieved in the general process of education and socialisation that precedes its actual application in the production process.¹⁰ Note, however, that the fact that many of these latter skills can be said to be head based, that is involving controlling, planning, and consciously remembering (cf. Hirschhorn and Mokray 1992), does not mean that they are necessarily highly *complex* activities in the sense of requiring a longer process of training of the requisite kind of productive subjectivity (Coriat 1992: 183–4).¹¹

In the third place, while the new technologies have not resulted in the total elimination of manual labour from automated processes of production (Alcorta 1999: 164), they have recreated the conditions for the

extended reproduction of what Marx called the *modern* manufacturing division of labour, that is those non-mechanised tasks and labour processes acting as an ‘*external department*’ of large-scale industry proper as the dominant form (Marx 1976: 588ff). Thus, the assembly process in many industries has remained heavily dependent on the manual skills of labourers. Other industries have been particularly resilient to mechanisation, given the current technical impossibility of replacing the subtlety of the movement of the human hand when dealing with certain materials (e.g. the clothing industry) (Walker 1989). Furthermore, the new technological conditions themselves have initially generated, as their own condition of existence, the proliferation of a multitude of new production processes or tasks, which are not mechanised, at least in their earlier stages (e.g. the assembly, testing, and packaging of the electronic micro-components needed by the development of robotised and computer-aided systems) (Henderson 1989).¹²

The upshot of all these material transformations in the capitalist labour process, has been an increase in the internal polarisation of the global collective labourer according to the type of productive attributes that its different members embody. As a concrete expression of the inner nature of the process of capital accumulation, these social processes have been *global in content* and *national only in form*. More specifically, this growing differentiation in the productive attributes of the collective labourer of large-scale industry has been at the basis of the emerging patterns of differentiation of national and regional spaces of accumulation in the last four decades. In effect, based on these productive changes and the revolution in communication and transportation methods, capital, globally, has been increasingly able to disperse the different parts of the labour process according to the most profitable combinations of *relative* costs and productive attributes of the different national fragments of the worldwide collective labourer (through their impact upon labour productivity and unit labour costs), thus giving birth to the NIDL.

The constitution of geographically dispersed ‘global chains of production of surplus-value’ certainly *started* with the relocation of simple manual labour processes (especially those of modern manufacture in the sense defined above), while concentrating its increasingly more complex parts in advanced capitalist countries. This is the particular initial manifestation of the NIDL that Fröbel and his colleagues rightly (though one-sidededly) captured in the late 1970s, without being able to uncover its general content. In fact, the very origins of the NIDL can be traced back to an even

earlier period, to what one might call its phase zero. In this ‘primitive’ stage, roughly spanning from the 1950s until the late 1960s, the NIDL mainly emerged in either relatively mature industries, which were not the key material carriers of capital’s production of relative surplus value (e.g. garments and footwear), or in those sectors that, at this stage, were only the precursors of the technological microelectronic revolution that would erupt and spread over the following decades (e.g. simpler consumer electronics, such as the transistor radio in Japan) (Iñigo Carrera 2013: 67). This international fragmentation of production processes gained momentum in the second half of the 1960s and into the following decade, when it accelerated its expansion into what would become key technological sectors, such as the fabrication of more advanced semiconductor devices based on integrated circuits (Henderson 1989: 50–5). Indeed, one could say that these early manifestations of the NIDL constituted its determination as a historical *presupposition* of the latest microelectronics technological revolution which characterises the current phase of large-scale industry proper. But the plenitude of its potentialities could only come about as a historical *result* of the leap forward in automation through the computerisation and robotisation of the labour process. In these more developed forms, the NIDL would expand to a much wider array of sectors.

Thus, the emergence of the NIDL was originally guided by capital’s search for not only relatively low wages, but also domestic working classes whose specific productive attributes included the habituation to ‘intensive, collective and disciplined labour’ (Iñigo Carrera 2013: 66) under harsh conditions (otherwise, it could plausibly be argued that most countries in, say, Sub-Saharan Africa would have been actively integrated into the NIDL instead of virtually being turned into reservoirs of consolidated relative surplus populations). This has actually been the case for domestic working classes with a genesis in wet-rice cultivating societies, like those of East Asia (Grinberg 2014: 9).¹³ Indeed, before being incorporated into the active industrial army, those national fragments of the global working class had formed a *latent relative surplus population* composed of formerly free peasants who were nonetheless subordinated to a centrally and hierarchically structured tributary system of exploitation (Iñigo Carrera 2013: 66). Therefore, it follows from this that the possession of a cheap domestic labour force that suited the emerging material requirements of the accumulation of capital on a global scale was not simply one factor among others. In reality, it was the *decisive* East Asian institutional specificity underlying its successful industrialisation process. Certainly, this process

has taken shape through the consolidation of particular national state policies quite accurately described in great detail by, so-called, statist scholars in the debates over the nature and features of ‘late development’ in East Asia (Amsden 1989; Wade 1990). But, as pointed out above, those policies did not *determine* the form nor the potentialities of the accumulation process in that region; they only *mediated* the creation and subsequent reproduction of the necessary conditions to accumulate under that new specific modality. These have included: export promotion; liberalisation of imports of inputs used in export activities, as far as trade policies were concerned; and, in the area of industrial policy, the achievement of the extremely accelerated concentration and centralisation of private industrial capital required for world market production (or, when necessary, for the direct concentration of industrial and/or banking capital under state ownership) (Grinberg and Starosta 2009: 772–3). The need for such a rapid concentration and centralisation of capital, in particular, meant that those processes could not be left in the hands of the free will of individual capitalists and had to be imposed upon them by the capitalist state in the form of indicative planning, the preferential allocation of credit tied to export targets, competition rationalisation, and so on. But, above all, these so-called developmental states had in all cases the political suppression of independent labour movements as a fundamental content of their policies (Deyo 1989).

Now, as Marx already emphasised in *Capital*, large-scale industry’s technical basis is revolutionary and ‘never views or treats the existing form of the production process as the definitive one’ (Marx 1976: 617). This generic feature of this material form of the production of surplus value has been potentiated by its microelectronic-based automation, which has led to a period of accelerated technical change. As a consequence, the technological support of the NIDL has experienced a permanent process of reconfiguration which, far from undermining the latter, has constantly renewed its basis and actually made possible its expansion into ever-newer sectors. In effect, as skill-requirements become revolutionised with each step forward in the automation and/or knowledge codification process, each of the organs of the collective labourer can be relocated into different countries according to the optimal combination of relative costs and productive qualities of the labour-power available in each national space of valorisation. In this sense, although as mentioned above the NIDL initially centred on the relocation of the valorisation process in ‘unskilled-labour-intensive’ industries, like clothing, footwear and, cru-

cially, microelectronics assembly, its subsequent *immanent* dynamics have led to its extension into an ever-wider range of industrial sectors, including relatively complex ones, such as steel, automobile, and microelectronics production (Grinberg 2014: 10). Moreover, these very technological developments eventually made possible the international fragmentation of the productive subjectivity of the different *intellectual* organs of the global collective labourer, as many of these scientific and creative productive functions also experienced a process of *relative* ‘de-skilling’ (Huws 2014). But this evidently presupposes the further expansion of the productive subjectivity of wage-labourers responsible for codification of that knowledge that can be now transferred elsewhere and that of those responsible for managing, when necessary, the direct productive co-operation of those geographically dispersed partial organs of the collective worker. And this more highly scientifically developed labour-power tends to remain based in ‘advanced industrial countries’ (at least to date) (Iñigo Carrera 2013: 79). The NIDL thereby has extended its reach into the realm of scientific and technological development, that is into intellectual labour.

Thus, as local peasant surplus populations in the most advanced East Asian economies were exhausted (first in Japan and then in the first generation Asian Tigers), domestic working classes began to be reproduced under new conditions which, in turn, have enabled them to perform the increasingly more automated and/or complex labour-processes entailed by the expansion of the NIDL into ever-renewed industries and/or productive functions (Grinberg 2014: 10). These transformations of their productive subjectivity have been necessarily *mediated by* the educational and R&D policies of the respective nation-states. However, the successful industrial upgrading of those countries was not simply determined by the implementation of those policies. In the first place, their ‘success’ was premised on the prior transformation of the qualitative content of the respective accumulation processes through their active subsumption under the NIDL as renewed sources of cheaper and equally disciplined labour-power. In the second place, it was also premised on the prior development of *skill-replacing* technical change in certain sectors of social production and/or the increase in the value of Japanese labour-power.

Although this necessarily meant that real wages tended to rise (since the greater complexity of labour-power entails that its value must be higher), that the workers’ movement strengthened, and that the class struggle intensified in these countries (since the rise in real wages cannot simply result from the pure automatism of the market but must be mediated

by the organised political action of wage-labourers as a class), East Asian working classes continued being *relatively* cheaper for, and more submissive to, capital vis-à-vis the working classes in the more advanced capitalist countries. Note, however, that this industrial upgrading of the first generation of East Asian late-industrialising countries was generally possible *after* the introduction of technological changes that comparatively decreased the complexity of labour-power needed to perform the respective productive tasks (Balconi et al. 2007: 842). On the other hand, as soon as a particular national working class became too expensive (which tended to occur as their productive subjectivity, and hence the value of labour-power, progressively lost *almost* all trace of their peculiar peasant origin and became a genuine product of large-scale industry), capital started to relocate the simpler forms of labour-power to other countries which offered new similar sources of cheap and compliant labourers. Production in ‘unskilled-labour-intensive’ industries contracted in these countries, while it expanded in others where surplus populations of peasant origin were still extensive and real wages lower (e.g. Malaysia, Thailand, Indonesia, Mexico, and China) (Grinberg 2014: 10).¹⁴

The global total social capital has used this reconfiguration of the international division of labour to multiply the differentiation in the conditions of reproduction of the various segments of the collective labourer of large-scale industry on a world scale. Yet, as previously mentioned, this general global transformation in capital accumulation took concrete shape not only through changed patterns of *national* differentiation, but also *within* the latter and through the formation of wider *supranational* or *regional* spaces of valorisation, whose constitution thereby required the mediation of the development of novel international juridical and political forms (e.g. the European Union, EU—see Chap. 7). In this way, the divergence in the conditions of reproduction of the expanded and degraded organ of the collective labourer could occur inside advanced capitalist countries themselves. This process was, however, more difficult and drawn-out. The very material and social forms of the production of relative surplus-value prevailing during the prior historical cycle of accumulation constituted a barrier that needed to be uprooted before the aforementioned multiplication of the internal differentiation of the collective labourer could take place.

In effect, the so-called Keynesian phase of capitalist development was based on the relatively undifferentiated reproduction of the two general types of productive subjectivity, that is expanded and degraded. This had a

twofold material basis. On the one hand, both kinds of subjectivity involved a certain degree of universality in the materiality of their productive attributes. This is obvious in the case of the expanded productive subjectivity, insofar as its increasingly scientific form aims at the conscious regulation of the universality of the movement of natural forces. But we have seen above that even the degraded productive subjectivity of large-sale industry requires the development of a labour-power with certain universal capacities before its exertion in the direct production process. On the other hand, however degraded the subjectivity of direct labourers was during this phase of capital accumulation, it still retained a strategic productive intervention at the heart of the production of relative surplus-value, that is in the production of machinery itself (Iñigo Carrera 2013: 61ff). In effect, both the calibration of machinery and the assembly process still depended on the subjective expertise of direct workers. This strategic intervention gave the degraded organ of the collective labourer a particular source of political strength in the struggle over the value of labour-power, which allowed those workers to force capital to moderate the differentiation of their conditions of reproduction vis-à-vis those performing more complex forms of labour. Under those circumstances, it was cheaper for the total social capital to socialise at least part of the reproduction of the working class through state-provided education, health, and so on, in order to produce universal workers on a mass scale. This is the essential content behind the development of the welfare state. Furthermore, this was not a merely an economic process that came about through the pure automatism of market forces, but it took necessary concrete shape in the political unity and increasing strength of the working class vis-à-vis the bourgeoisie in their struggle over the conditions of their social reproduction (see, for example, Clarke 1988: Chap. 10).

In order to spread the accentuated differentiation of the conditions of reproduction and exploitation of the varied organs of the collective worker within advanced capitalist countries, capital thereby had to break up the unity that the working class had achieved as an expression of those determinations of the prior historical cycle of accumulation. The very dynamics of the unfolding of the NIDL, mediated as they were by the general crisis of overproduction of capital on a world scale that exploded in the mid-1970s, provided the means by which such a process of restructuring could push forward (Iñigo Carrera 2013: 70–4). In the first place, in eroding the need for the strategic manual intervention and/or practical knowledge of direct labourers in the production process of machines,

the microelectronics-based automation of the labour process at the basis of the development of the NIDL undermined the material source of the political power of this segment of the working class. This situation was further compounded by the real or potential shift of the valorisation process that, as we have seen, this technical change made possible. In the second place, working class solidarity was weakened even further through the disciplinary effects of the growth of the relative surplus population in most advanced capitalist countries, brought about by the open manifestation of the said global crisis of overproduction (whose definitive resolution has been postponed ever since through successive cycles of credit-fuelled expansion) (Iñigo Carrera 2013: Chap. 6). Thirdly, the concomitant crisis of ‘national developmentalism’ in the Global South also swelled the ranks of the relative surplus population, which, in turn, provided the source for a massive increase of migratory flows into advanced capitalist countries (Ceceña and Peña 1995). As already mentioned, this politically regulated international migration allowed capital to superimpose the formal mediation of national citizenship on the differentiation of the conditions of reproduction between the two general kinds of productive subjectivity *within* the borders of advanced capitalist countries. Finally, it should be obvious at this stage of our argument that the economic and/or political integration of national spaces of valorisation into broader free trade areas (for example, the NAFTA, North American Free Trade Agreement) or regional political community (for example, the EU), has been yet another concrete form in which capital achieved the increased heterogeneity in the reproduction of the varied organs of the global collective labourer.

In sum, as a result of its own immanent tendencies, the simplest original form of the NIDL has evolved into a more complex constellation, whereby capital searches worldwide for the most profitable combinations of relative cost and qualities/disciplines resulting from the diverse past histories of the different national fragments of the working class (through their impact upon their general conditions of reproduction and condensed in the, so-called, historical component of the value of labour-power). Each country that is actively subsumed under the NIDL therefore tends to concentrate a certain type of labour-power of distinctive material and moral productive attributes of a determinate complexity, which are spatially dispersed but collectively exploited by capital as a whole in the least costly possible manner. In this way, capital has fragmented the reproduction of the different productive organs of the collective labourer so as to pay for each individual kind of labour-power *only* (or as near as possible to only)

that which is strictly necessary for the most immediate reproduction of that labour-power's relevant material and moral attributes. Crucially for the purpose of the general argument developed in this book, this different constellation of the global accumulation process does not involve the *transcendence* of the NIDL, but represents a more complex *form* assumed by the same general *content*, namely, the international fragmentation of the productive subjectivity of the global working class. Its general developmental dynamics have been nicely and succinctly captured by Grinberg (2011: 35), who argues that productions in specific industrial sectors has thereby expanded in some countries while contracting in others where new and more advanced sectors developed, following a rhythm determined by the evolution of those two main factors—that is, material changes in the capitalist labour process and relative cost and productive attributes of national labour forces (see also Silver 2003).¹⁵

CONCLUSION

This chapter has offered a revision of the original NIDL thesis that, I think, can account for the apparently more variegated recent trajectory of the world economy and, therefore, which can avoid many of its shortcomings. In order to do this, I reframed the insights found in Fröbel, Heinrichs and Kreye's contribution in an alternative approach to the relationship between the worldwide unfolding of the Marxian 'law of value' and 'uneven development'. More specifically, this approach posited the production of relative surplus-value through the development of *large-scale industry* as the driving force of the essentially global dynamics of capitalism.

On this basis, I have identified the main tendencies and transformations in the global process of capital accumulation since the 1960s, arguing that their *novel* features have certainly revolved around the constitution and subsequent development of the immanent dynamics of the NIDL. However, I have also noted that, contrary to the over-generalisations of the early formulations of the NIDL thesis, this modality in the material articulation of the global accumulation process has not led to the sheer *disappearance* of the, so-called, classical international division of labour. Indeed, as the subsequent case-study chapters in this book by Purcell, Fitzsimons and Guevara, and Grinberg make clear, it has been the continued reproduction of this long-standing pattern of differentiation in the world economy that

explains the developmental potentialities of the accumulation process of most Latin American countries in the Southern Cone, both their stagnation since the mid-1970s up to the early 2000s and their recent boom in the last decade fuelled by the hike of international prices of primary commodities (Grinberg and Starosta 2014).

By contrast, the argument showed that the initial rise and more recent upgrading of East Asian industrialisation, which has been often used as evidence against the original formulation of the NIDL thesis by Fröbel, Heinrichs and Kreye, has actually responded to developmental patterns firmly rooted in the key social processes associated with it, namely: the potentialities created by contemporary forms of microelectronics-based automation; and the large local availability of relatively cheap, highly disciplined, and easily trainable working classes. However central to the long-term development of the East Asian countries, state policies did not *determine* their industrial success. They only acted as a necessary national political mediation of social processes grounded in the wider transformations of the global production of relative surplus-value by the total social capital.

More broadly, the central underlying implication of this chapter's contribution is fundamentally methodological, and concerns the inner connection between what outwardly appear as two sets of differentiated aspects of capitalist production: the economic and the political; and the global and the national (Grinberg and Starosta 2014). In a nutshell, the approach developed here takes the immanent unity of the capitalist world market as the starting point of the investigation. In this view, changing patterns of *national* differentiation should be seen as expressing the contradictory determinations of the essentially *global* unity of the accumulation process. In turn, the specific *political forms* prevailing in each country (that is, class struggle and state policies) should be grasped as the necessary mode of existence and motion of the *economic content* of capital accumulation. These relations are not grounded in the abstract general principles of 'structuralist' methodology. Instead, I think that they follow from the most general determination of capitalist social relations discovered by Marx through the critique of political economy; they entail the subsumption of the productive powers of the global collective labourer to the autonomised movement of the alienated product of their social labour. Such is the fundamental content of the self-expansion of capital on a world scale.

NOTES

1. This, however, begs the question of why one or the other form of the international division of labour tends to prevail in a particular country or region. I think that neither Fröbel, Heinrichs and Kreye nor their critics offered a convincing answer. As Grinberg and Starosta (2009) argue, the existence and reproduction of those protected domestic markets have historically required the continuous inflow of an extraordinary mass of social wealth which complemented the surplus-value extracted from the domestic working class to the point of marking the very specificity of the accumulation process in those national spaces (see also Chaps. 2 and 3). The availability in some countries of an abundant mass of ground-rent, deriving from the presence of exceptional non-reproducible natural conditions in agriculture, mining and/or energy-production, has provided such an additional source of social wealth.
2. Besides, it should be noted that the 'relocation back north' line of reasoning relied on what has been convincingly shown to be a mythical story about the effects of new flexible technologies on the productive attributes of direct workers (Tomaney 1994).
3. This was grasped by Fröbel, Heinrichs and Kreye to a certain extent, although mentioned mainly in passing (see, for instance, Fröbel 1982: 538). In a subsequent study on export processing zones, they explicitly considered the debates on the effects of new technologies on the NIDL and correctly recognised that 'innovations in process technologies have not led firms to turn their backs on low-cost sites in the world-wide organization of their production', since the 'wage-differential' between 'North' and 'South' for the more skilled work often required could be even greater than that between wages for unskilled workers (Fröbel et al. 1987: 15).
4. As we shall see in Chap. 6, these dynamics of relative simplification and a subsequent international relocation of intellectual labour are also at the basis of the Celtic Tiger phenomenon, with software development as one of its emblematic sectors.
5. International migration is thus part and parcel of the NIDL and not its refutation (as implied, for instance, by Cohen 1987). Sassen (1988) offers a more balanced view.
6. In this sense, data on FDI cannot empirically settle the question about the validity of the NIDL thesis, as some authors argue (for example, Kiely 1995: 94).
7. See Jacobson et al. (1979), Walker (1989) and Liokadis (1990), for diverse critiques of the world-system/dependency theory leanings of Fröbel, Heinrichs and Kreye's account.

8. For further elaboration of the determination of capital as the alienated total social subject of the movement of modern society (and hence the inverted social existence of human beings as its personifications), see Starosta (2016).
9. This mistaken focus on manufacture instead of *machinofacture* was accurately picked up by Jenkins (1984) in his early critique of the NIDL thesis, although he did not explore the implications of this confusion any further.
10. See Balconi (2002) on this twofold effect of new technologies on the skills of direct labourers. This general contradictory development of the particular and universal dimensions of labour-power subsumed to large-scale industry had already been identified by Marx as its characteristic form of motion. See his discussion of education clauses of the Factory Acts in *Capital* (1976: Chap. 15), and also Starosta (2011).
11. As for the, so-called, polyvalent worker, it has been amply demonstrated that its development might not entail any vertical expansion of skills. Instead, it has involved in most cases the horizontal incorporation of additional, quite simple tasks, that is the sheer intensification of labour (Elger 1990). Rather than being an obstacle, the generally weaker and more compliant working class in certain 'peripheral' countries might have been even more suitable for the greater labour intensity allowed by flexible production methods. This has been noted to be true of Japan as well, one of the hidden secrets behind its competitiveness vis-à-vis American and Western European capitals in the 1980s (Dohse et al. 1985).
12. Strictly speaking, the multiplication of the surplus population relative to the needs of the accumulation process has also constituted a transformation of productive subjectivity produced by the automation of large-scale industry (see Marx 1976: 553–75).
13. As Grinberg (2014: 2) points out, wet-rice cultivation has, among others, the following two characteristics. First, it is highly labour-intensive, notably during planting and harvest periods. Secondly, whatever their extent and complexity and, consequently, degree of centralisation, all irrigation systems have required the 'cooperation at various levels between the farmers in a single water control unit' (Bray 1986: 67).
14. It is this difference in timing that largely explains the divergence in the patterns of industrial development (that is, the extent of the deepening process) between the first generation East Asian Tigers and their 'followers' in South East Asia. Also, many of those later followers had a comparatively greater mass of ground-rent for capital to recover through protected domestic markets before being turned into sources of cheap and compliant labour power for world market production. Thus, it was generally after the collapse of raw material prices (hence of ground-rent) in the early 1980s

that these countries changed their mode of integration into the international division of labour (this also applies to the case of Mexico in Latin America). This, of course, does not mean that the industrialisation process in East Asia simply responded to the dynamics captured by the ‘flying geese’ thesis (cf. Kasahara 2004). Indeed, the NIDL has taken shape in a hierarchical structure (Bernard and Ravenhill 1995) which, due to global-scale requirements of different types of labour-power, narrows at the top and widens at the bottom. Moreover, the advent of China, with its ‘unlimited’ supply of relatively cheap and disciplined labour-power, has strongly restricted the upgrading possibilities of the rest of the followers.

15. As Grinberg (2011: 35) points out, the ‘flying geese’ theory reflects only the second of these factors. Moreover, this theory does not explain why industrial production for world markets using a relatively cheap and disciplined unskilled of labour force could develop in Japan in the first instance.

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PART II

Country Case Studies

‘Post-neoliberalism’ in the International Division of Labour: The Divergent Cases of Ecuador and Venezuela

Thomas F. Purcell

In recent years global transformations associated with the new international division of labour (NIDL), led principally by the demand for raw materials in China, have breathed new life into forms of development based upon the reproduction of the classical international division of labour (CIDL).¹ Venezuela and Ecuador stand out as two well-known cases of left-populist, or post-neoliberal, regimes that have emerged in Latin America and whose ‘revolutionary’ projects have been financed by revenue from the export of raw materials.² In 2014, the share of primary exports as a percentage of total exports was 84 per cent in Ecuador and 98 per cent in Venezuela, signifying that they are both national processes of accumulation into which ground-rent primarily flows.

As Part I of this book has made clear, the CIDL was never simply reducible to the polarisation of an industrialised core and a dependent periphery, the latter restricted to the role of supplier of raw materials and staple foods. Rather, there was an important process of accumulation in the periphery whereby local industrial capital was able to valorise through the appropri-

T.F. Purcell (✉)
Department of Politics and Applied Global Ethics,
Leeds Beckett University, Leeds, UK

tion of inflows of ground-rent; a process which today also points towards the continuation of elements of the ‘classical’ within the ‘new’ international division of labour (Grinberg and Starosta 2009). Moreover, the continuation and deepening of the CIDL through the rise in primary commodity prices has, somewhat paradoxically, put back on the development agenda the use of income from natural resources for the development of productive forces. It is in this context that the ‘post-neoliberal’ projects of Ecuador and Venezuela have emerged.

In the recent academic tendency to assess the emergence of left-wing regimes in Latin America by distinguishing between moderate progressive governments (Brazil, Chile, and Uruguay) and, so-called, post-neoliberal variants (Bolivia, Ecuador, and Venezuela) little attention has been paid to the internal dynamics of countries’ respective economies. In particular, the latter post-neoliberal variants are often lumped together, either under the notion that natural resources are being used to chart an alternative, welfare enhancing and poverty reducing path in the global economy (Lebowitz 2006; Raby 2006), or that resources are being squandered by profligate macro-economic populists, ineluctably reproducing the ‘resource curse’ (Bebbington and Bebbington 2011; Weyland 2009). Yet, a central claim of this book is that state policies cannot autonomously shape national processes of capital accumulation. Instead, when national spheres of accumulation are seen as aliquot organs of global capital, state policies can be seen as mediating the realisation and development of the worldwide process of capital accumulation. This chapter argues that even if state policies appear to contradict such unity by pursuing seemingly anti-capitalist development policies, upon closer inspection they reveal themselves as what they are: contradictory expressions of the realisation of capital accumulation rather than a challenge to the forces of global neoliberal capitalism in the name of the people.

With empirical reference to Ecuador’s Citizens’ Revolution and Venezuela’s Socialism for the Twenty-first Century, this chapter argues that—depending upon whether the primary export is of agrarian or mining origin and whether property rights are in private or public hands—the modality, magnitude, and direction of rental appropriation and transfer can differ in significant ways. This turns on Iñigo Carrera’s (2007) distinction between agricultural and mining landownership to explain particular national forms of capitalist development and the specific manner in which these are inserted into the global economy. Specifically, the dual landlord-

ism in Ecuador in the form of an agro-export elite and a state-controlled oil sector contrasts with the singular dominance of the state-controlled oil sector in Venezuela. This material basis can be used to explain the manner in which the two national forms of insertion into the international division of labour have determined different national variants of post-neoliberalism.

The chapter is structured as follows. Section one briefly presents Iñigo Carrera's distinction between agricultural and mining landownership. Section two explains the political economy of exchange rate policies and access to foreign exchange in the contexts of dollarisation in Ecuador and extreme overvaluation in Venezuela. By reflecting upon contrasting economic and development discourses, section three asks why Ecuador signed a free trade agreement with the European Union (EU) in 2014, while Venezuela perseveres with the alternative regional trading bloc, the Bolivarian Alliance for the Peoples of our America-Trade Agreement of the Peoples (ALBA-TCP). The chapter concludes with general reflections on the political economy of ground-rent based capital accumulation in conditions of so-called post-neoliberalism.

DIFFERENT FORMS OF GROUND-RENT AND THE SOCIAL POWER OF LANDLORDS WITHIN THE INTERNATIONAL DIVISION OF LABOUR

As Part I of this book has already argued, owing to the presence of a vast, irreproducible wealth of natural resources, national processes of capital accumulation in Latin America have been dominated by the export of raw materials. Historically, the insertion of Latin America into the international division of labour played a specific role in the development of global industrial capitalism. By cheapening the means of subsistence and reducing the value of labour power in the new industrial centres, the total global social capital experienced an increase in both labour productivity and the rate of surplus value production (Grinberg and Starosta 2009; Chap. 2). Yet, in order to gain access to non-renewable natural resources attached to such portions of land, capital has historically ceded a portion of surplus-value 'known as ground-rent' (Marx 1981: 755–6). Capital must absorb this loss of surplus-value, so as to not call into question the general social form of landlordism and therefore the very existence of private property (see Chap. 3). Moreover, to the extent that the commodity in question

is consumed overseas, this cost is borne by the capital of the importing countries (Iñigo Carrera 2007: 15).

This ground-rent has its basis in natural conditions outside the control of normal capital, that is to say, it is appropriated by landlords who monopolise differential and absolute natural conditions that allow for greater labour productivity in the production of raw materials. Insofar as higher labour productivity is capitalised as ground-rent in the price of production, it is the appropriation or recovery of this extra surplus-value by industrial capital that has characterised the insertion of Latin American raw materials-exporting societies into the international division of labour. However, as Harvey (2005: 70) recognises, ‘to the degree that natural resources are unevenly distributed so a certain kind of uneven geographical development results built around conditions of, say, agricultural productivity or the presence of oil reserves’. In fact, the differences between agriculture and mining are key to explaining the development of capitalism in specific countries. We can draw out the implication of this uneven geographical development within and across Latin American societies through an appeal to Iñigo Carrera’s (2007: 13–14) analysis of mining and agrarian landownership and the specific capacities of landlords to appropriate differential, absolute, and monopoly rents (Fitzsimons 2014: 137–41).³

In general, the ability of landlords to appropriate ground-rent is premised upon the possibility that they could withdraw their lands from production at any moment; however, within this there are two further determinations. The first rests on the difference between the turnover cycles of capitalist production for agrarian and mining landlords. The latter can sit upon a given stock of social wealth (such as oil or minerals), calculating that what they do not appropriate today they can tomorrow, and that in the time in-between the magnitude of rents potentially appropriable will usually increase. This materiality of the mining productive process and the resource itself (which is non-renewable and naturally limited in supply) therefore increases the social power of mining landlords who can withdraw lands from production, thereby determining the marginal lands in the sector (Fitzsimons 2015: 10). For agrarian landlords, however, the decision to withdraw their lands from production can only be compensated for by an increase in the magnitude of future ground-rent. And, as is obvious, the rise in ground-rent due to lower supply will benefit those lands not removed from production. Therefore, in comparison with individual agrarian landlords, mining landlords exercise a relative individ-

ual independence in being able to remove their lands from a determined cycle of production and as a way of multiplying monopoly rents (Iñigo Carrera 2007: 13). Unlike the differential portion of the rent, monopoly rent varies not only according to fertility and productivity within the sector, but also according to the monopoly power of landowners relative to the demand from the global economy in general for a limited and non-renewable natural resource.

In contrast to mining landlords, then, agrarian landlords could only sustain monopoly rent on the condition that they restricted the use of their lands *en masse* through an act of solidarity as a class of landholders. It is this particularity that puts before us a second determination:

by the unity of its content the accumulation of capital is a global process. It is this global unity that is realised by taking the fragmented form of different national processes of capital accumulation, which confront each other antagonistically on the world market. The determination of landlords as a class springs from the global unity of capital accumulation, while their fragmentation into national landlord classes is nothing but the expression of the limits of this class unity in conditions of international competition (Iñigo Carrera 2007: 14, author's translation).

So, for example, if through an act of class solidarity agrarian landlords within a country unilaterally withdraw their lands from production to increase ground-rent, the immediate beneficiaries of this action would be the landlords in the other countries that produce the same commodity. Therefore, should agrarian landowners wish to increase ground-rent on their land it would not be sufficient to count upon national solidarity, but they would have to put their class solidarity to work at the scale at which prices of production are determined—that is, the world market. This is because differential rents spring automatically from competition established between agrarian landlords, whereas monopoly rents can, in part, be put into action through conscious class action—in organisations such as the Organisation of Petroleum Exporting Countries (OPEC). Therefore, when organised as a class at the world market level, mining landowners will have more bargaining power than agrarian landlords *vis-à-vis* industrial capital, making the monopoly rent of mining landlord states—including oil landlord states—much larger (Grinberg 2010).

In addition to the different modalities of differential, absolute, and monopoly rent formation between mining and agrarian landown-

ers, an added social determination is that mining lands tend to be held under public ownership as a means of ensuring that the state earns a net income higher than oil extracting and refining capitals—a pattern set by Venezuela’s 1943 Hydrocarbons Act.⁴ In contrast, agriculture has historically developed under the control of large private landowners (*latifundios*) and the intervention of the state has largely been restricted to measures such as export taxes and currency overvaluation to divert a portion of the ground-rent away from landlords (see Caligaris, Chap. 3).

The remainder of this chapter argues that the difference between agrarian and mining rents can explain the contrasting concrete political forms taken by state-policies in Ecuador and Venezuela. The difference between the two raw material-exporting countries is not simply due to a quantitative relation (an empirically intractable problem) determined by the type or magnitude of ground-rent, but is also related to the qualitative differences determined by the materiality of the raw material in question. The commonality is that state policies are always the vehicle that channels ground-rent towards industrial and commercial capital through a combination of exchange rate policies, export and import taxes, domestic market protection, price regulation, public subsidies, and state spending (Iñigo Carrera 2007). The following two sections explore specific aspects of exchange rate and trade policies in a comparative empirical context, to show how forms of landlordism and their respective insertions into the international division of labour have determined different national variants of post-neoliberalism in Ecuador and Venezuela.

THE POLITICAL ECONOMY OF EXCHANGE RATES AND NATURAL RESOURCES

The original insertion of both Ecuador and Venezuela into the international division of labour was founded upon the export of cocoa and coffee (Chiriboga 1978; Pérez Sáinz and Zarembka 1979). Inflows of differential ground-rent permitted the formation of an incipient national banking sector, the emergence of wage labour relations, and the embryonic development of internal markets. When in the 1930s the price of raw materials fell precipitously, the Ecuadorian state devalued the national currency, along with most other Latin American exporting states in an attempt to stabilise revenues and support agrarian exports, before embarking upon a shallow form of import substitution industrialisation (ISI) (Maignashca and North

1991). However, in Venezuela the discovery of large oil deposits fifteen years earlier and the massive rise in exports provoked a revaluation of the national currency by 64 per cent, relative to the US dollar, in the period 1929–1938 (Hein 1980: 232). This led to the structural decline of agriculture as export prices became ‘laughable’, failing even to cover costs of production (Alberto Adriani, cited in Baptista and Mommer 1987: 12). It specifically spelled the end of the predominance of coffee and cocoa as the commodities that articulated the link between the Venezuelan national process of accumulation and capital accumulation at the world scale (Pérez Sáinz and Zarembka 1979). Therefore, while in Ecuador the predominance of agro-exports demanded a devaluation of the national currency, in Venezuela devaluation was seen to be more harmful to the economy than the potential gains from reactivating traditional agricultural exports—especially since a devaluation would favour foreign oil companies (Baptista and Mommer 1987).⁵

This juncture is worth revisiting here in order to historically locate the roots of exchange rate dynamics and vested interests that today influence the concrete political forms of post-neoliberalism in Venezuela and Ecuador. More recently, in the former, strict exchange rate controls were imposed to prevent capital flight during the failed business strike in 2002–2003, pegging the new *bolívar fuerte* (BsF) at an overvalued rate of BsF 1.90 to the US dollar (USD) and requiring applications to the specially created foreign exchange commission, Comisión de Administración de Divisas (CADIVI), to access dollars. In Ecuador, a financial crisis in the late 1990s and intense lobbying by the agro-export elite saw the abandonment of the *sucre*, as the economy was officially dollarised in 2000 at an extremely undervalued rate of 25,000 *sucres* to the dollar, hitting small national savers hard but reducing internal private and public debt (Gastambide 2010: 351; Ruiz Acosta and Iturralde 2013: 69). These exchange rate politics have given rise to distinct *rentier* social relations: in Venezuela, one that revolves around an oil landlord state in conditions of extreme currency overvaluation; in Ecuador one that revolves around a dualism between an agro-export elite and an oil landlord state with limited control over monetary policy.

It is estimated that during the Chávez government in Venezuela (1999–2013) exchange rate overvaluation—understood here as a deliberate state policy rather than the unintended impact of windfall revenues as argued by theorists of the ‘Dutch Disease’ (see Corden and Neary 1982)—remained higher than 200 per cent to the US dollar and has reached peaks of 400

per cent (Kornblihtt 2015). Despite five devaluations since the creation of the CADIVI in 2003, the 2015 USD exchange rate of BsF 6.3 (now administered by the National Centre for Foreign Exchange) was overvalued by almost 500 per cent when measured against the parallel ‘real’ market USD exchange rate of BsF 37.75 (Kornblihtt 2015).⁶ The Venezuelan private sector only generated around two per cent of the foreign exchange that enters the country, but a huge dependence upon imports meant that the 98 per cent of foreign exchange generated by the state (through the state oil company PDVSA) was later sold at a fraction of its real value to a national importing capitalist class (Lozada 2013; Weisbrot 2014).⁷ This overvaluation means that persons exchanging national for foreign currency receive a greater quantity of social wealth than if the exchange were at parity. For example, USD100 obtained through the official rate costs BsF 630, while the same amount sold on the parallel market generates BsF 3775, making the parallel market dollar six times more expensive.⁸ This has given rise to an almost systematic process whereby groups able to import goods through the official overvalued rate profit handsomely from the appropriation of ground-rent, by selling at the parallel rate—despite state price regulation and severe sanctions against speculation. This brief synthesis illustrates what underlies the price speculation, hoarding, and heightened social tensions that have erupted in Venezuela since 2014.⁹ Amidst endemic corruption and growing shortages, but with public opinion firmly against a drastic devaluation of the *bolívar fuerte*, calls have been made to nationalise all foreign commerce (Ellner 2015; Sutherland 2015).

In contrast to the situation in Ecuador, explained below, for the majority of the Bolivarian Revolution—and at least up until 2014—the Venezuelan state has easily financed its imports and has not faced substantial balance of payments problem, recording substantial current account and trade surpluses in 2013 and 2014 with over USD40 billion in foreign reserves (Weisbrot 2014). However, the plunge in oil prices towards the end of 2014 threw the Venezuelan accumulation process into considerable financial turmoil as the steady flow of dollars dried up. To sustain populist social spending and price controls, the government resorted to the inflationary expansion of the money supply and the restriction of imports. Yet, as foreign reserves dwindled to around USD15 billion (their lowest value since 2003), commentators from both ends of the ideological spectrum are suggesting a likely default in 2016, when USD10 billion worth of the dollar denominated bonds are set to expire (see Hausmann 2014; Sutherland 2015). Thus, with inflation nearing 200 per cent towards the

end of 2015, it remained to be seen whether the government of President Maduro would devalue the drastically overvalued *bolívar fuerte* as a means of confronting an impending external debt crisis.

In Ecuador—a dollarised economy without the capacity to print or devalue its currency—concern has been rising about the non-oil trade deficit, which reached USD9 billion (9.7 per cent of GDP) in 2013, and an overall trade deficit of USD1.088 billion.¹⁰ Therefore, although it is evident that ground-rent finances imports in both countries, Ecuador also requires sufficient foreign exchange flows to maintain the balance of payments and to safeguard dollarisation. These flows are dependent upon both state oil policy and the private agro-exports elite. In 2013, the private sector in Ecuador generated 43 per cent of foreign exchange through agro-exports, while the state generated 57 per cent through oil exports (Banco Central del Ecuador 2015). The advantage of this dual *rentier* political economy was evident when the dollar was undervalued on international markets between 2007 and 2008 and Ecuador benefitted from the rare occurrence of high prices for natural resource exports and a competitive exchange rate. This scenario saw both the agro-export elite and the state appropriate a high magnitude of differential rents under a seemingly harmonious cycle of economic expansion, recording 4.2 per cent annual growth between 2006 and 2013 (Unda 2013). However, the sharp appreciation of the dollar on international markets from mid-2014, coupled with the fall in oil and commodity prices, has since revealed the limits of dollarised post-neoliberalism in Ecuador.

In the absence of the ability to manipulate the exchange rate as a mechanism to transfer ground-rent, or to directly influence relative prices and therefore competitiveness, Ecuador has turned to an ad hoc system of tariff barriers, selective import substitution, and export compensation to channel ground-rent to local industrial and commercial capital. For example, in response to currency devaluations by Ecuador’s neighbours, blanket tariffs of 21 per cent and 7 per cent on Colombian and Peruvian imports, respectively, were introduced in January 2015—some of the savings from which were to be channelled towards export promotion for national industrial capital in a bilateral move that contravenes the rules set out in the framework of the Andean Community. This is ostensibly part of an industrial development project by the Ecuadorian government designed to ‘Transform the Productive Matrix’ by promoting ‘value added’ national industrial and agricultural activity (Ministerio de Coordinación de la Política Económica 2011). However, in practice the demands of

safeguarding dollarisation has meant that domestic market protection has been reduced to a strategy of limiting the exit of foreign exchange, rather than a mechanism targeted at productivity-enhancing national development (Ospina Peralta 2015). As we will see in the next section, trade deals and inter-regional agreements also emerge to a large extent out of the distinct *rentier* social relations that are evident in Venezuela's and Ecuador's post-neoliberalism, the former led firmly by political ideology and the latter by economic 'realities'.

TRADE AND DEVELOPMENT POLICIES

Venezuela spearheaded the creation of ALBA-TCP, first through an agreement with Cuba in 2004 and later with eight other countries, including Ecuador.¹¹ Becoming one of the signature members of the ALBA-TCP resonated with Ecuadorian President Rafael Correa's official discourse around trade. As he stated upon his election in 2007, one of his 'revolutionary' platforms was to be a new form of 'Latin American integration that would create new organisms to replace mercantilist structures' (Becker 2012: 73). Nevertheless, in contrast to Venezuela, the importance of ground-rent from agrarian and maritime lands has increased for Ecuador over the past ten years as non-processed primary exports, such as bananas, shrimps, tuna, coffee, cacao, and non-traditional exports—for example, flowers—have become crucial sources of foreign exchange. Given that the magnitude of ground-rent available for appropriation is limited in comparison with Venezuela's mono-production economy, for instance, ensuring the competitiveness of such exports is essential to Ecuador. As we will see, for this reason the recent nationalist rhetoric in Ecuador's post-neoliberal trade policy has never reached the same depth of anti-imperialist rhetoric as it has in Venezuela, remaining instead at the level of diplomatic and political posturing over sovereignty.¹² While Ecuador moved to reconcile its agro-export interests within new free trade agreements with the EU—an indication that the magnitude of ground-rent in Ecuador is not enough to sustain import-substitution of any significant kind—the ALBA-TCP has been touted as a 'counter-hegemonic alternative' to (North American) free trade and 'capitalist globalisation' (Muhr 2012).

The ALBA-TCP bloc is structured upon the principles of 'fair and sovereign trade' in the areas of energy, finances, food, education, health, telecommunications, and infrastructure that directly involve eight signature members along with around twenty non-country members that par-

ticipate in energy agreements and cooperation. The ALBA-TCP has been held up as:

the first time a country [that is, Venezuela] has used its resources not only for endogenous development, but also for regional development. A new strategic regionalism that breaks, transcends and redefines the traditional parameters of international trade in favour of cooperation, complementarity and solidarity (Aponte García 2014: 19, author’s translation).

In a regional context where leftist governments have come to power in a growing number of countries, Venezuela has used accumulated foreign reserves to lend to borrowing states with low creditworthiness—such as Argentina, Bolivia, Ecuador, and Uruguay—at below market rates (Grinberg 2010: 195). And within the ALBA-TCP group, Venezuela has committed USD 250 million for the construction of an Economic Fund for Cooperation and Productive Investment, along with USD1 billion for the emission of a special ALBA bond (Aponte García 2014: 198). The use of such funds has been championed by some as the means by which cooperative—rather than comparative—advantage will support the regional production of ‘use-values over capital accumulation’ (see, for example, Aponte García 2014: 194–5).

Although defenders of the initiative are keen to counter claims that the whole project rests upon Venezuela’s oil wealth, the very strengths of the bloc are cited as its wealth in raw materials generally: the highest reserves of oil in the world; 50 per cent of the world’s lithium reserves; the highest reserves of natural gas in Latin America; huge mineral reserves, including iron, gold, coltan, nickel, aluminium, copper, steel; large areas of cultivable land; and biodiversity.¹³ This oil and natural resource diplomacy is couched in ideologically progressive notions of alternative production and cooperation.¹⁴ For instance, the ALBA-TCP has established new concepts of productive and business complementarity through bilateral and multi-state ‘grand national enterprises’, ‘grand national projects’ or action programs, and ‘grand national institutes’ or research centres—the scale and novelty of which have been enthusiastically celebrated by commentators (for example, Aponte García 2014: 19; Muhr 2012: 233). However, the grand national enterprises in particular reproduce the same normative and voluntaristic logic of national initiatives in Venezuela—such as social production companies (see Purcell 2013: 154)—whose explicitly stated aim is to satisfy social needs by producing use-values outside the ‘logic’ of capital

accumulation. The problem with asserting this latter point is that use-value and exchange-value are not separate forms assumed by goods when subject to social rather than private production, but are distinct determinations of the same object, the commodity. As such, in the capitalist mode of production social wealth does not and cannot ‘simply appear as the material accumulation of use-values but, rather, as the accumulation of value’ (Iñigo Carrera 2006: 191).

Based upon this materialist reading, the main issue confronting the ALBA-TCP is that the form of wealth which it has at its disposal (that is, ground-rent) would have to be transferred into a form of capital that is able to actively participate in the transformation and development of society’s productive forces—that is, into normal productive capital—if it were to engender development. That is to say, if the project could move to concentrate ground-rent at the scale necessary to put ALBA-TCP on a par with world market levels of productivity, but under a social form of regional state-control that redistributes and reinvests to meet the political and social goals of ALBA-TCP, then something other than an integration of ‘underdeveloped’ landlord states dressed up in ideological platitudes could emerge. Yet in practice, and notwithstanding the regional social and welfare achievements of the ALBA-TCP (see Muhr 2012: 235–6), inter-regional ALBA-TCP trade (aside from oil) is comprised of low-value industrial goods and foodstuffs that only made up around USD 8 billion worth of trade between 2005 and 2011 (Aponte García 2014). As Grinberg (2010: 198) has argued, ‘the strong opposition of Venezuela to the implementation of the Free Trade Area of the Americas (FTAA), did not come from the recognition by their political leaders and populations of the policy failures of the 1990s’; instead, ‘it arises from the recovery of the amount of ground-rent available for appropriation and its capacity to sustain industrial production for the protected domestic/regional markets’.

Although state policies protecting the national market have also emerged as a fundamental basis for the post-neoliberal project in Ecuador, the dual *rentier* economy therein has limited the ability to completely disavow the international context into which they are inserted. For instance, it has been pointed out that the purported USD1.7 billion in foreign exchange savings in 2013 were less influenced by import substitution measures than by the high prices reached by the export of shrimps, bananas, and cacao (El Comercio 2014). It is in this context that, after years of abstaining from inter-bloc negotiations, in January 2014 Ecuador returned to the

negotiating table under pressure from the imminent expiry of the EU’s Generalised Scheme of Preferences, which gives developing countries preferential access to the EU market. In the face of severe internal pressures (both for and against), new negotiations culminated in an agreement signed in July 2014. The definitive agreement will not be signed until 2016, when it also has to be approved by the National Assembly and the Constitutional Court. However, the interim deal ensures that Ecuadorean products, such as shrimps, bananas, African palm, and tuna will continue to enter the EU under preferential terms.

Earlier in 2014, Peru and Colombia—Ecuador’s main competitors for the export of certain raw materials—had already signed bilateral free trade deals, and had undertaken the currency devaluations discussed above, intensifying regional competitive pressures within the international division of labour. For example, in 2014 the EU entry tariff for the export of a metric ton of bananas from Peru and Colombia was 110 €, whereas Ecuadorean exporters were paying 132 € per ton (CDES 2014). Given that the banana sector is Ecuador’s most important export after oil, in terms of both foreign exchange earnings and employment, the importance of this agrarian source of ground-rent finally swayed the decision to sign the deal. In this context, Ecuador was forced to equal conditions agreed by Peru and Colombia, which included: new safeguards for intellectual property rights (on seeds and agro-chemicals); the liberalisation of the entry of capital goods and processed foodstuffs (such as milk and cheese); the lifting of restrictions on EU companies to purchase land and water reserves; the liberalisation of financial services and telecommunications; and the opening up of state contracts and public purchasing to bids from EU companies. This has been interpreted as a form of modernisation that favours pragmatic international trade in the interest of the *rentier-financial*-importing sectors, aligned with the demands of transnational capital (Muñoz 2013: 123). Furthermore, the deal is perceived to protect overwhelmingly the interests of large agro-exporters, intensifying local competition and negatively impacting thousands of small peasant producers. For example, the average production costs of a litre of milk in the EU is less than 27 cents, while in Ecuador the costs are around 40 cents—hence concern that the influx of cheaper milk is likely to bankrupt the many peasant family producers involved in the sector (CDES 2014).

The deal also illustrates the limits of class solidarity among agrarian producers, outlined earlier in this chapter. If Ecuador were to renege on free trade deals and lose markets for its agrarian exports, extra differential

rents would flow to competitors whose land in production has a guaranteed market. Coupled with the inability to control their monetary policy so as to undertake a competitive devaluation, which may have offered an exit route from the agreement, Ecuador is locked into the same pattern of exporting raw materials and importing higher ‘value added’ goods and services.

As this book has stressed, processes leading to the formation of the NIDL have not been static (see also Fröbel et al. 1980), rather they have taken shape in a wide and constantly changing range of combinations of relative cost and productivity characteristics of national labour forces. Taking inspiration from the perceived possibilities inherent in the NIDL and the, so-called, knowledge-based economy, the state in Ecuador has in fact targeted investment toward ‘future revolutionary industries such as biotechnology, nanotechnology, bio-electronics, new materials and new energies, socially shaped by the growing environmental awareness and concerns’ (Pérez 2008). As it stands, knowledge-based development initiatives have an ideological rather than substantive character, seen for instance in the creation of Yachay—a new high-tech City of Knowledge—that seeks to emulate an ‘innovation milieu’, characteristic of Silicon Valley, in an old sugar cane hacienda. Meanwhile, free-trade agreements that ensure the future competitive export of primary resources are being rationalised by the government in terms of merely being a short-term measure to ensure inflows of foreign exchange that can fund the take-off of these other knowledge-based public investment strategies.

For different reasons, what the two cases of ALBA-TCP and free trade with the EU demonstrate is that all divisions of labour, whether national or regional, presuppose the international division of labour. As such, any form of protectionism ‘amounts to a defence within, not against, the world market. Capitalist social relations are always already world market relations’ (Bonefeld 2008: 71). Therefore, the ability of the ALBA-TCP to act as a defence against ‘imperialism’ or ‘neoliberalism’ within the international division labour rests upon the magnitude and qualitative origin of mining rents that the Venezuelan oil state can appropriate and transfer. In contrast, Ecuador’s dependence upon foreign exchange from agrarian exports means the state cannot risk agrarian rents flowing to their nearest competitors, and the state has therefore defended its free trade agenda with the EU in terms of economic pragmatism.

CONCLUSION

To understand the divergent political forms of post-neoliberalism in Ecuador and Venezuela, this chapter has developed insights from Iñigo Carrera's distinction between agrarian and mining landlords. Drawing empirically upon examples of the political economy of exchange rates and trade, the chapter demonstrated that the source and magnitude of ground-rent available to finance different development models has a qualitative impact upon the capacity for state intervention. Venezuela's *sui generis* vision of post-neoliberalism, based upon a mono-production economy that generates huge oil rents and transfers social wealth to the rest of society through extreme currency overvaluation, rejects free trade and seeks a stronger model of regional integration based upon claims concerning social justice. To this end, the flagship regional development and trade initiative ALBA-TCP, financed unilaterally by Venezuelan oil rents, has favoured the ideological—rather than substantive—promotion of new concepts of productive and business complementarity, which, it alleges, point to a route out of, and beyond, capitalist relations of production. In contrast, Ecuador's dual dependence upon (public) mining and (private) agrarian ground-rent has tempered the government's radicalism: on the one hand, it has financed a shallow and limited process of ISI under the ideological banner of promoting a knowledge economy; while, on the other hand, it has worked to ensure the continued viability of dollarisation and access to agro-export markets. In sum, this chapter has shown that far from representing an alternative form of development that can resolve conditions imposed by an external international context, post-neoliberalism is predicated upon, and can be differentiated by, forms of the recovery of mining and agrarian ground-rent in raw material-exporting societies.

NOTES

1. For data on the primary commodity boom since the early 2000s, relating to demand for raw materials produced in Latin America specifically, see Arboleda (2015: 2).
2. The term post-neoliberalism is widely used as shorthand to describe the policy and rhetoric adopted by left-populist governments across Latin America from the 2000s.
3. See Note 3 in Chap. 3, for a definition of these different types of ground-rent. What is specific about landlords in the petroleum industry is their capacity to determine the location of marginal lands. By restricting pro-

duction and monopoly rents, the latter then forms the basis for the appropriation of further differential rents because the higher price permits capital to invest in lands not previously used in production (Fitzsimons 2014: 141; Fitzsimons 2015: 10). It should be noted that in practice the different forms of rent never exist in isolation (Caligaris 2014); the schematic differentiation made in this chapter does however help to explain distinct concrete political forms taken by state policies when one type of rent *predominates* over others.

4. This was the institutional-juridical means by which the landlord state in Venezuela tried to secure the fullest possible appropriation of ground-rent.
5. By the time Ecuador discovered large oil deposits in 1967 and began large-scale exports in 1972, a small agro-exporting landlord class was well institutionalised as a financial-commercial-*rentier* elite (Chiriboga 1978; Conaghan 1988).
6. Estimates of an equilibrium exchange rate for Venezuela are somewhere around BsF 30 to the US dollar (Weisbrot 2014).
7. Because of the historic magnitude of currency overvaluation in Venezuela, oil has been the only commodity that can pass through the overvalued exchange rate while allowing oil-producing capitals to valorise normally.
8. With interest rates at 15 per cent and annual inflation running at 60 per cent in Venezuela, trading in dollars is estimated to be 50 times more profitable than either saving or investing in productive activities (Lozada 2013).
9. Since the 2002–2003 business lock-out and attempted coup against Chávez, business groups have attempted to use their control of imports as political leverage, inducing shortages and driving up prices to spread political disaffection with the government. Meanwhile, speculation on imports, bribing customs officials, and smuggling goods over the border to Colombia (a phenomenon referred to as *bachaqueo*) have become such lucrative forms of appropriating ground-rent that they have acquired an almost systemic character.
10. This illustrates the tendency for dollarised economies in Latin America to incentivise imports over exports (Hira and Dean 2004).
11. ALBA-TCP member states include Antigua and Barbuda, Bolivia, Cuba, Dominica, Ecuador, Nicaragua, St Vincent and the Grenadines, and Venezuela.
12. Ecuador refused to sign the Andean Trade Preference Act with the US—a stance linked to the right to grant asylum to National Security Agency defector Ed Snowden—and removed US forces from a military base in Manta they were using as a forward operating location in the ‘war on drugs’ in Colombia. In June 2011, Ecuador was the only country to hold

- out over the vote to readmit Honduras to the Organisation of American States following the coup against Manuel Zelaya. In 2012, Ecuador also boycotted the sixth Summit of the Americas in Colombia in protest at the exclusion of Cuba (Becker 2012: 74, 81).
13. See presentation by Alianza Bolivariana para los Pueblos de Nuestra America Tratado de Comercio de los Pueblos, the Food and Agriculture Organization of the United Nations Committee on World Food Security 39, Rome, Italy, 19 October 2012 (available at: http://www.fao.org/fileadmin/templates/cfs/Docs1112/CFS39Docs/SpecialSession/CFS_39_Special_Session_Alba_Food_Sp.pdf, accessed 29 May 2015).
 14. Together with Chile and Mexico, which also have market-oriented economies, the ALBA-TCP countries have formed the Pacific Alliance—a regional trade and investment bloc (Lansberg-Rodriguez 2014).

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The New International Division of Labour in ‘High-Tech Production’: The Genesis of Ireland’s Boom in the 1990s

Tomás Friedenthal and Guido Starosta

This chapter examines the foundations of Ireland’s rapid expansion during the 1990s and offers an alternative approach to those dominating debates that emerged about the potentialities and limits of this idiosyncratic developmental model and its apparently successful integration into the global economy. Whilst neo-classical economists have tended to explain the Irish fast-growing experience in terms of the adoption of a liberalisation and export-led strategy that opened the economy to vast inflows of high-tech foreign and direct investment (FDI) (Barry 1999, 2000; Krugman 1998; Ó Gráda 2002), critical commentators have argued that such an account ignores the active role played by the Irish state, and related institutions and

T. Friedenthal

Department of Economics, University of Buenos Aires, Buenos Aires, Argentina

G. Starosta (✉)

Department of Economics and Administration,
National University of Quilmes and National Scientific and
Technical Research Council, Buenos Aires, Argentina

organisations, in shaping the precise mode in which the ‘local’ economy integrated into ‘globalised networks’ of high-tech production and innovation (Ó Riain 2004). According to this alternative view, the Irish case is that of a, so-called, Network Developmental State that manages the connection between the local and the global and, through its active involvement in industrial development, steers the national economy along a path of integration into the technologically most dynamic elements of the world economy. In contrast to the authoritarian ‘state developmentalism’ of East Asian Tigers, and their (initial) reliance on the ‘super-exploitation’ of cheap manual labour, the Celtic Tiger model was predicated on its democratic institutions and better qualified, higher-wage jobs in cutting-edge sectors of the economy.

Without disputing the empirical value of many of the *descriptions* offered in the literature, here we take issue with those apparently opposed *explanations* insofar as they both account for the trajectory of the Irish developmental process on the basis of the successful implementation of ‘correct’ nation-state policies (even if they disagree on the precise nature of those policies). By contrast, this chapter argues that the Irish experience is yet another concrete expression of the further development of the essentially *global* laws of motion of the new international division of labour (NIDL), as explained in Chap. 4. More specifically, it argues that the *particularistic-skill-replacing* technical change that characterises the production of relative surplus-value across the globe has allowed capital to integrate into the NIDL not only national working classes which were materially and morally suitable for the performance of the simpler manual tasks initially required by the micro-electronics revolution, but also those with comparatively more skilled but still relatively cheaper labour-power. Moreover, we show that the very dynamics of the NIDL then made possible its extension into the more intellectual productive functions of the labour process of capitalist large-scale industry, such as software production. Premised on its origins as a source of latent and stagnant surplus population for the global accumulation of capital, the specificity of the Irish national sphere of valorisation has been determined by those two potentialities of the historical unfolding of the NIDL (that is, the subjection of relatively more complex and intellectual productive functions to its laws of motion). We therefore show that the particular state policies and institutions prevailing in Ireland are therefore grounded in this specific form of integration into the NIDL, which they have *mediated* but not *determined* by themselves.

THE HISTORICAL PRESUPPOSITIONS OF IRELAND'S SUBSUMPTION WITHIN THE NIDL

As mentioned above, the specific modality and potentialities of the subsumption of the Irish space of valorisation under the NIDL have their historical premise in the forms taken by Ireland's genesis as a nationally-independent territorial jurisdiction. In order to comprehend the origins of the Celtic Tiger, we must first place the process of capital accumulation in Ireland in a long view of its historical development. More concretely, in this first section we take a brief look at the early subsumption of the Irish economy under the capitalist international division of labour, which flowed from its existing links with England. We shall see that the secret of Ireland's developmental path resides in the formation and chronic reproduction of a relatively large surplus population, as a direct result of the unfolding of global capital accumulation; that is, that the Irish working class became essentially redundant for global capital accumulation by the end of nineteenth century, a condition that would stretch, in different shapes, well into the twentieth century.

The Economic Content of the Genesis of the Irish National Space of Accumulation: The Formation and Chronic Reproduction of a Rural Relative Surplus Population

The upsurge of industrial capital accumulation in England during the second half of the eighteenth century (with its concomitant increased demand for food), led to a long-term rise in corn prices which, also bolstered by the Napoleonic wars, caused the price of wheat to double between 1770 and 1810 (Regan 1980: 10). This process had a profound impact on the dynamics of capital accumulation in Ireland. In effect, the sharp increase in corn prices resulted in a widespread shift across the country from grazing to tillage, which brought with it a profound change in the rural social structure. The labour-intensive character of tillage promoted the subdivision of holdings and thus enabled the formation of new familial units that could survive on ever-smaller plots devoted to the subsistence cultivation of the potato.

Thus, an explosive rural population growth ensued in Ireland, intensifying the competition for land and increasing the pressure for a further subdivision of holdings. In turn, this led to an expansion of ground-rent,

which would force an increase in tillage area at the expense of subsistence plots in each individual holding (Mulhall 1988: 97). The contraction of the acreage left for the peasantry's reproduction after the rise in rent was facilitated by the increased cultivation of the potato. Since this was both a rotation and a subsistence crop, the tenant's small plot could be split into a part devoted to corn for rent and another for growing potatoes for subsistence. Rural family labour engaging in cottage industry gave that contraction further room to develop. All this obviously implied a systematic extension of the annual hours worked by the rural family. As Breathnach (1988: 122) points out, these developments meant that by 1800 'the Irish economy had become characterised by a much-bloated labour force heavily dependent on what was to prove an ephemeral export market'.

By the time the Act of Union was passed in 1800, incorporating Ireland into the United Kingdom, the country possessed a fairly developed manufacturing industry compared with most European countries (with the exception of England) (O'Malley 1981: 29–30). Non-textile industries experienced growing competition but still managed to stay afloat by means of restructuring on a larger scale to keep pace with their English counterparts (O'Malley 1981: 31–2). However, the further advance of mechanisation, coupled with the definitive phasing out of tariff protection stemming from the provisions set in the Act of Union, heavily impacted on the Irish cotton and woollen manufacturers and many of them shut down permanently during the depression of 1825–1826. Weaving and embroidery of muslin continued in Ulster, but cotton yarn was being increasingly imported. Due to the concurrent development of powered spinning of fine linen yarn, many Belfast cotton mills were able to change over to linen production and escape closure. On this basis, Belfast managed to become a major global location for the development of mechanised fine linen spinning.

These developments dealt a hard blow to the rural poor, who depended upon domestic spinning to supplement their meagre farming incomes (Breathnach 1988: 129–30). The situation was further complicated when a rise in corn prices, which had formerly resulted in the profound changes in rural structure discussed above, returned after the end of the Napoleonic Wars in 1815. To make matters even worse, the decline of domestic spinning in Ireland coincided with the beginning of a secular rise in cattle prices that led to a widespread conversion from tillage back into (export-oriented) grazing lands. The basis of the entire existing rural system was seriously undermined, and it was only a matter of time until it

eventually collapsed. As a result, the idiosyncratic Irish emigration trend started to gain momentum and would finally turn into an absolute population decline after the devastating Great Famine of 1845–1848.

If economic hardship had been limited mainly to the textile industries up to that point, further progress in the mechanisation of large-scale industry in the 1870s in Britain and elsewhere spread to the rest of the Irish manufacturing sector (O'Malley 1981: 33–4). And yet there was a notable exception to this general trend toward industrial decline. As Breathnach (1988: 130) notes, the aforementioned constitution of Belfast as a specialised site for mechanised linen production induced the establishment of a supplementary engineering industry and attracted a major shipbuilding sector. The north-eastern city and its surrounding satellite towns thereby became a classic urban-industrial region of the industrial revolution. By contrast, the remainder of Ireland became a location for agricultural production with low labour requirements, namely export-oriented cattle rearing (O'Malley 1981: 39). As a result, this latter part of the country would eventually turn into a vast reservoir of relative surplus population.

Nevertheless, general economic stagnation and decline in the south of Ireland was not the immediate outcome of its industrial crisis. As a matter of fact, the Great Famine was followed by a period of relative prosperity for Irish farming (Mulhall 1988: 98–9). Reversal to pasture due to the change in prices involved a steep fall in the total number of holdings while larger ones actually increased, therefore implying a process of consolidation enabled by the decimation of the surplus rural population through emigration and the famine. Moreover, these very same conditions of capital accumulation in southern Ireland would also form the material basis for the effective abolition of landlordism. Thus, the death knell for landowners started to ring when the agricultural crisis of the early 1880s set in.

In effect, diminishing transport costs increasingly made possible the integration of new national spaces with exceptional natural conditions into the international division of labour as raw-material and agrarian-commodities producing countries.¹ Domestic agricultural prices dropped sharply as a consequence and, just as the earlier rises in corn and cattle prices involved an expansion in the ground-rent available for appropriation in Ireland, this later fall in prices caused it to plummet. This shrinking of agrarian surplus meant that the valorisation of small agrarian capitals and the landlords' appropriation of ground-rent were no longer mutually compatible. So the land question moved to the forefront of the political arena and, as the mostly British ownership of the land turned the Irish

land question into a national question, the struggle against landlordism became a struggle for national independence. The outcome of this struggle was: the abolition of landlordism, by way of a series of changes in the juridical relations governing the possession of the land—that is, agrarian reform (Guinnane and Miller 1997); and it would, soon after, result in the partition of Ireland and the emergence of a new national space of accumulation, the Irish Free State, later the Republic of Ireland.

Whereas a certain degree of concentration of holdings mentioned above meant that a novel class of prosperous small agrarian capitalists had already developed (that is the larger farmers, who represented about one-third of the population in 1900, according to Mulhall 1988: 99), this process was far from uniform and co-existed with the reproduction of the pre-existing fragmentation of land holdings into very small plots. In this sense, the abolition of landlordism and the establishment of peasant proprietorship did not do away with previously established patterns of differentiation in the rural social structure (Mulhall 1988: 129). Insofar as the land reform simply transferred existing holdings into outright proprietorship, the resolution of the land question did nothing to uproot the precarious basis for the material reproduction of the great bulk of Irish farmers, who continued to survive on the production of young cattle in tiny holdings for sale to dealers and fatteners elsewhere (Breathnach 1988: 130). Thus, the continued existence of a rural social structure that permitted the reproduction of the peasant through subsistence agriculture constituted an exceptionally large and sustained source of rural *latent* surplus population and determined a relatively low level of wages (which in turn acted as a barrier to mechanisation).

By the time both the land question and independence had been settled, capital accumulation by larger farmers in Ireland was being sustained by a double source of extraordinary social wealth. On the one hand, the remaining (rather minimal) ground-rent available for appropriation in the national space of valorisation, previously captured by the landlord, now flowed to a large extent into the pockets of the farmers. On the other hand, we saw that the prevailing conditions of reproduction of labour-power implied its relatively low value, which in turn entailed an increase in the surplus-value directly extracted by the eastern, larger farmers when employing wage-labour. Additionally, surplus-value was indirectly appropriated in commodity circulation when purchasing the smaller peasants' livestock below its normal price of production for subsequent fattening and re-sale.² The agricultural sector was thus the core of the newly

independent state's economy, employing 670,000 out of a total workforce of 1.3 million (Kirby 2010: 16).

*The Continued Reproduction of the Irish Surplus Population
in New Modes of Existence Under a Weak 'Inward-Looking'
Industrialisation Process*

The decade following independence witnessed the continuity of capital accumulation under these conditions, which included intense and relatively free trade with England (Breathnach 1988: 131). But Ireland entered a *seemingly* different development path after 1932 when a regime of import substitution industrialisation (ISI) was introduced. Domestic industry protection was extensive and the average tariff level was raised from nine per cent to 45 per cent between 1931 and 1936, while tariffs on some goods reached 75 per cent. Non-tariff measures—such as quotas, import licenses, and regulations—were set in place, among which the most important were the Control of Manufactures Acts (1932 and 1934) aimed at securing Irish control of domestic industry. Furthermore, a state bank was established to divert surplus capital into the hands of industrialists, as banking institutions were reluctant to lend even under government guarantee (Kirby 2010: 17).

Here an important point of clarification is needed. As Caligaris's and Inigo Carrera's earlier chapters flesh out in great detail, this phase of capitalist development geared towards an inward-looking industrialisation process did not actually involve a *qualitative transformation* in the specific modality of the accumulation process *vis-à-vis* the initial agro-export stage. Instead, it entailed the expanded reproduction of the very same mode taken by the overall circulation process of capital, defined by the appropriation of a portion of ground-rent flowing into the national space of accumulation through the export of primary commodities. In this sense, both are part and parcel (strictly, *stages* or *phases*) of the, so-called, classical international division of labour (CIDL).

With respect to all these general features, the Irish experience with ISI hardly differed from similar developmental trajectories elsewhere in the world. But what sets the case of Ireland apart is that, from its very early stages, the limited amount of ground-rent available for appropriation meant that capital had to resort to additional extraordinary sources of social wealth to sustain its accumulation under this specific modality, and in the face of the ever-growing difference between local and world-market

production costs. Furthermore, these limitations would also rule out the eventual constitution of fragmented foreign normal capitals (that is transnational corporations, or TNCs) as the fundamental subjects of the appropriation of ground-rent (on this see Chap. 2). Rather, this form of the accumulation process took shape through the proliferation of a multitude of domestically owned small industrial capitals with a very low degree of concentration.

Therefore, this mode of accumulation of capital showed from its very beginning that it had specifically constrained potentialities to unfold in Ireland. Unlike the similar contemporary experiences of the largest Latin American countries (for example, Argentina, Brazil, and Mexico), the more limited magnitude of the extraordinary sources of social wealth sustaining capital's valorisation process in the Irish Republic's national space did not allow for its development beyond a (particularly weak) primary ISI phase, and had very limited capacities for labour-absorption. Thus, manufacturing output rose by just 7.2 per cent between 1932 and 1936, while gross national product at constant prices was only ten per cent higher in 1938 than in 1931, even though industrial employment rose from 110,600 to 166,100 over the same period, suggesting an overall productivity decline (Kirby 2010: 18).³ Emigration volume fell, in turn, to an average of 14,000 a year over the decade (it had previously reached treble that rate, partly a consequence of the 1930s' world crisis). Furthermore, the inward-looking orientation of new industrial production brought about a 29 per cent decline in exports by 1933, which only recovered their 1930s' volume in 1960 (Kirby 2010: 18).⁴ The fairly substantial industrial employment increase (about 40 per cent) over those first years of the new regime was nonetheless insufficient to eliminate the high chronic unemployment that stemmed from the peculiar, and essentially unchanged, Irish rural social structure. In sum: the ISI phase was already facing the immanent limits of its particularly small domestic market in the 1940s; considerable balance of payment problems emerged in the 1950s; while the 1.7 per cent per annum pace of output growth and 0.2 per cent average annual increase in manufacturing employment over the course of that decade caused unemployment to swell; and emigration reached over 50,000 a year, so that between 1946 and 1961 the workforce shrunk from 1,228,000 to 1,053,000 people (Kirby 2010: 19).

In our view, this quantitative evidence expresses the following. The reproduction of the specific content of Ireland's process of capital accumulation during this period revolved crucially around the association between

small landholding agrarian industrial capital and small non-agrarian industrial capital over the appropriation of a twofold source of extraordinary social wealth: on the one hand, the remaining (although declining) ground-rent; on the other, and crucially for the purpose of our argument, the extraordinary surplus-value stemming from the peculiar conditions of existence of the Irish workforce, which allowed the cheapened purchase of their labour-power without undermining its normal long-term reproduction. Moreover, given that the magnitude of ground-rent was meagre and actually diminishing, capital accumulation increasingly came to rest one-sidedly on the relative cheapness of Irish labour-power. Those feeble foundations sustaining the accumulation of capital would mean that in less than two decades the widening productivity gap, with normal capital accumulating beyond the national borders, was already confronting the Irish process of capital accumulation with its specific inherent limits. As Breathnach (1988: 132) succinctly puts it, 'Ireland's rather tentative attempt at economic autarky ... ran out of steam in the 1950s ... at a time when the rest of Europe was booming'.

This idiosyncratic economic trajectory under such a weak ISI process carries a broader significance, whose implications would become apparent in the following decade, as we discuss in the next section. But, for the moment, let us just note that it means that this developmental path did nothing to transcend the general condition of the Irish national sphere of valorisation as a reservoir of surplus labouring population *vis-à-vis* the essentially global contradictory dynamics of capital accumulation. It only meant that the reproduction of the Irish working class as a relative surplus population changed its mode of existence.⁵ The only novelty of the ISI phase *vis-à-vis* the earlier reproductive conditions of the Irish working class was that its chronic mode of existence as stagnant surplus population extended beyond the agrarian sector to include its employment by non-agrarian small industrial capitals.

Such were the conditions for the reproduction of capital and the working class in the late 1950s in Ireland. The specificity of the Irish process of capital accumulation was defined by the dominance of small capitals both in agrarian and non-agrarian sectors of industry, whose survival therefore progressively hung upon the purchase of the relatively cheap labour-power of Irish workers, while it constantly produced a permanent outward international migratory flow of the national labouring population. The prospects for the subsequent trajectory of this national space of accumulation did not look very promising. Yet, just as its potentialities appeared to be

dwindling (if not, simply vanishing), the global process of production of relative surplus-value started to undergo profound transformations, which would revolutionise the specific form of the Irish process of capital accumulation and breathe new life into its development.

THE EMERGENCE OF THE NIDL AND GLOBAL CAPITAL'S EARLY TAPPING OF IRELAND'S CHEAP LABOUR-POWER RESERVES IN QUALITATIVELY NOVEL FORMS

By the 1960s and through the production of relative surplus-value, which was actually behind the increasing productivity gap between normal capital accumulating in industrially advanced national spaces and small capital accumulating in Ireland, global capital was entering the germinal stages of a thorough revolution in the materiality of the capitalist labour process that would lead to the emergence and development of the NIDL. In its general determination, this emerging re-configuration of the international division of labour would involve the worldwide fragmentation of the different phases of the production process of large-scale industry.⁶ Ireland became a very early expression of these novel tendencies shaping capital accumulation on a global scale. This should come as no surprise, given the country's prevailing condition as a reservoir of plentiful cheap wage-workers who, additionally, possessed the necessary productive attributes to be actively incorporated as specific organs of the, now globally dispersed, collective labourer.⁷ On top of this essential determination, Ireland also enjoyed a favourable geographical location, in proximity to main industrial and consumer centres, and possessed natural conditions well suited for the maritime transport of commodities. As a consequence, from the 1960s onwards the process of capital accumulation would start to reproduce under a new form. State policies mediating the reproduction of the previous mode of accumulation were consequently dismantled, and were replaced by forms of state direct regulation that channelled the unfolding of the potentialities of Ireland's changed role within the international division of labour.

Ireland had already started to experience a persistent net inflow of foreign capital in the decade prior to the 'opening' of the economy in 1959, which was only partly due to state borrowing under the Marshall Programme.⁸ However, the volume of this net capital inflow increased substantially during the following decade, escalating strongly after 1969.

In turn, the specifically outward orientation of capital accumulating under this new basis naturally involved a swift increase in the share of Irish manufactured exports to total exports, which increased from 6 per cent in 1950 to 19 per cent in 1959, and 37 per cent in 1971 (McAleese and Martin 1972). And, given that this surging trend in manufactured exports was essentially *global*, it naturally brought about a thorough reduction in trade restrictions in all major markets, which was nothing more than the establishment of the international juridical forms better suited to mediating the novel specific content of global capital accumulation. From the point of view of the national form of the capitalist state, this implied a new set of external and internal juridical and political regulations.

With respect to Ireland, the transformation of external juridical relations comprised the following measures, among others: the repeal of the Control of Manufactures Acts (which hitherto impeded the foreign ownership of Irish industry) in 1959; the unilateral reduction of external tariffs in 1963 and 1964, enabling the signing of the Anglo-Irish Free Trade Agreement (AIFTA) with the UK in 1966; the extension to Ireland of bilateral rights granting most-favoured-nation treatment by its principal trading partners (under the auspices of General Agreement on Tariffs and Trade (GATT), several years before Ireland became a contracting party in 1967); and finally, Irish integration into the European Economic Community (EEC) in 1973, which resulted in the abolition of the Common External Tariff (CET) on Irish exports by 1978. In the domestic sphere, the economic transformation was mediated by two main state policies: in the first place, grants to export-oriented industries—part of which were conceded only to firms located in rural areas; and, in the second place, a complete remission of income and corporate profit tax on manufactured exports, which was replaced by a ten per cent flat rate on all manufacturing in 1980.⁹ Additionally, there were institutional changes within the state, among which the key role and increasing power and organisational autonomy of the Industrial Development Agency as a ‘hunter and gatherer’ of FDI stands out (Ó Riain 2004: 40). Note, however, that these changed political and juridical regulations were not the underlying *cause* of the new economic forms taken by the accumulation process in the Irish space of valorisation, as most of the literature tends to assume (thereby inverting the form and content of the phenomenon at stake). Instead, they only acted as *necessary mediators*, at the national level, for their emergence and subsequent reproduction, which was

actually *grounded* in the transformations originating in the essentially *global* dynamics of the production of relative surplus-value by the total social capital. Indeed, we have seen that the seeds for Irish integration into the nascent modality of the NIDL had already been sown and were germinating by the time the juridical and political forms needed for its effective development first set in.¹⁰

Normal capital producing commodities for the world market thus flowed into Ireland, seeking the higher profitability attainable by exploiting the fairly well-trained but relatively cheaper Irish workforce in a range of advanced industrial labour processes, which was made possible by new skill-replacing technological changes. The range of sectors that attracted the relocation of capital was initially very varied and included food and milk products, textiles, clothing and footwear, metals and engineering, pharmaceuticals and chemical industries (McAleese 1972: 80). However, it would be fundamentally the electronics, engineering, and chemical-pharmaceutical industries that would act as the main ‘drivers’ of this reconfiguration of the material basis of capital accumulation in Ireland (Breathnach 1988: 133). ‘Phase zero’ of the NIDL’s worldwide unfolding was taking place, and Ireland was directly involved (see Chap. 4).

Insofar as active participation in the NIDL required that individual capitals reached the necessary scale of operation to be able to compete on the world market, the rapid economic transformation involved precluded its channelling through the valorisation of small capitals that had dominated the Irish economy in the prior phase, since they obviously lacked the requisite degree of concentration.¹¹ The immediate subject of this process was thereby internationally relocating normal capital in the form of booming inward FDI, which was export-oriented. Indeed, foreign enterprises established in Ireland in the early 1960s exported, on average, 75 per cent of their gross output (McAleese 1972: 79–80). But the specific nature of new foreign capital formation in Ireland is also evident in the diverse origin of FDI and the particular evolution of the distribution of Irish manufactured exports by area of destination (McAleese and Martin 1972: 616–7). Together, the varied composition of origin of capitals (mainly British and German, with some US) and of the destination of their production, rule out the idea that capital relocating in Ireland was driven mainly by proximity and prospects of unrestricted access to the European market.¹² A breakdown of manufactured exports in 1970 also gives us a more detailed picture of the particular production processes in

which Ireland specialised by that time. As well as subsectors of the chemical, textile, and construction industries with significant shares in exports, it is possible to observe a strong presence of subsections of machinery production, and especially domestic electric equipment and medical and measuring instruments, in manufacturing export trade (McAleese and Martin 1972: 628–31).

Still, the peculiar pattern of specialisation followed by Ireland in this process of integration into the NIDL was fundamentally determined by its direct participation in the production process of a core element of the novel technological base on which that division would come to rest, namely, computers. Although some (mainly US) electronic component manufacturers had already established plants during the 1960s (Drew and Foster 1994)—in what amounts to early evidence of the international fragmentation of information technology (IT) production—the decision by Digital Equipment Corporation (DEC) to set up a large-scale minicomputer manufacturing operation in Ireland in 1971 is widely acknowledged as a milestone in the Irish IT industry's development. Soon after, five other minicomputer producers and a mainframe manufacturer followed suit and located assembly plants in the country (van Egeraat and Jacobson 2004).

As with the previous wave of FDI in Ireland, the establishment of computer assembly operations was an expression of the international fragmentation of industrial labour processes, albeit a specific one. Indeed, although computers were the material basis for the automation of capitalist large-scale industry, and thus for a tendency towards the elimination of simple direct labour, their own production initially multiplied the need for the latter, insofar as computer assembly and subassembly originally required mostly *relatively* simple productive tasks. Thus, from the very outset the global total social capital tended to locate the simpler portions of the computer manufacturing labour process outside industrially advanced countries. Two main reasons explain why this nascent industry established its assembly facilities specifically in Ireland (and Scotland): the existence of a suitably skilled but relatively cheap workforce; and geographical proximity to user markets, given the rather bulky character of the final product, which entailed significant transport costs. Thus, while the peculiar combination of skills available and wage levels accounts for capital's location in Ireland (and Scotland) rather than in other Western European relatively low-wage countries (such as Spain, Greece, or Portugal), proximity and the kind of

exploitable labour-power determined why computer final assembly was not initially located in (and actually was the last computer manufacturing process to relocate to) the East Asian region, where a substantially cheaper and more compliant workforce was being eagerly incorporated by the global total social capital into the active industrial army of labour. Conversely, even at that early stage of the development of the computer industry there were many components that could not be profitably produced in Ireland and which were already being sourced from East Asia, as technical skill requirements were substantially lower and geographical distance was comparatively unimportant given the small size and weight of this type of product.¹³

These tendencies in the evolution of the NIDL in Ireland would continue to unfold with the subsequent technological supersession of the minicomputer by the personal computer (PC) in the following decade. Emblematic landmarks in this industry's trajectory in Ireland were Apple's establishment of a PC assembly plant in 1980, and Intel's decision to locate an advanced microprocessor wafer manufacturing plant, along with PC and motherboard assembly facilities, in 1989. These foreign investments spearheaded a wave of relocations of computer manufacturers into the country, which would lead to a veritable boom in the Irish hardware industry up until the mid-1990s (van Egeraat and Jacobson 2004). However, increasing competition from lower wage countries, particularly from East Asia, struck the Irish electronic components sector, causing many low- and medium-tech component manufacturers to close their plants between 1995 and 1998 and relocate abroad (Barry and Van Egeraat 2008).¹⁴ The increasing substitution of smaller notebooks for bulky desktop PCs in the personal computer market rapidly eroded the proximity advantage and led to the rise of East Asia as a world market site for computer assembly (firstly in Taiwan and South East Asia, and later in China) (Dedrick and Kraemer 2008). This latest technological development in the computer industry would therefore drive Ireland's status as a location for system assembly of PCs into a final decline.

Now, if the rise and demise of the computer hardware industry was not synonymous with the rise and demise of the Celtic Tiger, this could only mean that a novel base for Ireland's integration into the IDL had developed in the meanwhile. As we shall see, this novel base was software production. So Ireland, once a leading location (along with Scotland) for the offshoring of computer manufacturing, became an equally leading world market site for the offshoring of software production.

THE RISE OF THE IRISH SOFTWARE INDUSTRY AND THE BASIS FOR THE CELTIC TIGER'S BOOM IN THE 1990s

The global emergence of a separate software industry can be traced back to the 1950s and 1960s (Dossani and Kenney 2008: 53–4). Its subsequent evolution in the late 1970s and early 1980s revolved around two main lines of development. On the one hand, the material autonomisation of software from hardware and, on the other, the achievement of sufficient production scales for the creation of a distinct software market composed of independent software vendors (ISVs) (Grad 2015). These two mutually reinforcing processes came to fruition in the 1980s. On the hardware side a first key milestone was the successful introduction of the IBM PC in 1981, which combined Intel's microprocessor and Microsoft's MS/DOS operating system (the Wintel standard that would become dominant by the late 1980s), and which resulted in declining hardware prices and an increasing demand for applications. But perhaps more fundamental for the evolution of the independent software industry was the introduction of the workstation in the early 1980s, which was adopted by business users given the limited computing capabilities of the first generations of PCs. The workstation was not only suited to a wide spectrum of business end uses, but also enabled stand-alone programming for mainframes. On the software side a first crucial landmark was the development and universal adoption of the Unix operating system, which combined with the workstation to crystallise in the emergence of the Unix-Workstation (U-W) standard. But what really revolutionised the ISV industry was the development of (and further recoding of Unix in) portable C programming language, which gave rise to Unix/C. In effect, these developments warranted the portability of applications and *system* software (Johnson and Ritchie 1978). Thus, if the U-W standard rendered software *production* platforms independent (because the workstation allowed programming for a whole spectrum of computers), software *products* also attained that status, inasmuch as they could be easily ported to run on very different and rapidly evolving machines. Crucially for the development of the NIDL in the industry, Unix/C programming language opened the doors to a wide fragmentation of the software production process, for it enabled the detachment of system architecture, design, and integration from programming itself, thus rendering the programming component modularised (Dossani and Kenney 2008: 54).

These successive technical revolutions in software production changed the productive attributes that capital demanded from wage-workers involved in its development. In the early mainframe era, a relatively simple (and gendered) division of labour emerged between the *planner*—a highly-skilled, usually male, scientific user—and the *coders*—usually women—who carried out the less complex work (Ensmenger and Aspray 2002). Plain coding initially involved the purely mechanical task of translating a set of instructions or operations delivered to the coder in a language of a relatively higher level of abstraction into a machine-specific numerical (ultimately binary) code. With the development of assembler programmes and assembly languages, this simplest aspect of coding—and therefore of software labour—was fully automated and correspondingly eliminated. This consequently changed the nature of coding, and gave birth to the *programmer*. Inasmuch as assembly language statements usually maintained a one-to-one correspondence with machine language instructions, while the latter varied with the different computer architectures, programming (coding) was now, in its simplest aspect, machine-specific. This required an understanding of the material structure of the machine from the programmer that only *on-the-job* experience could provide. This platform dependency of software was a great obstacle to its development.

The first clear step towards the overcoming of these initial limitations came with the development higher-level languages, whose main conceptual lines of development revolved around formal syntactic notation and formal semantic definitional techniques (Sammet 1972: 607). However, the vast proliferation of higher-level languages signalled that the potential to transcend platform dependency ultimately remained unfulfilled. Programming still involved a great deal of routine manual code-writing and was still very much dependent on an understanding of machine-specific architectures; in other words, it involved a great deal of labour that only a relatively experienced workforce could deliver. These material conditions of software production resulted in the *particularistic*, craft-like character of early programming that was much debated in the late 1960s (Ensmenger and Aspray 2002). In turn, this lack of *universality* in programming labour implied that the necessary productive attributes of the programmer could not be yet developed through a process of formal education.

Under these circumstances a, so-called, software crisis erupted. Essentially, it was a result of the increasing technological gap between accelerating computing capacity and lagging software productivity, so that

'the errors in and cost of writing software tended to grow geometrically with the size of a software artefact' (Campbell-Kelly 1995: 87). Larger-scale projects also clashed with the prevailing subjective, or craft-like, basis of the software technical division of labour. All this led to a series of efforts aimed at the development of the scientific management of its production process, which materialised in, so-called, structured programming during the 1960s and in the discipline of software engineering in the mid-1970s (Mir et al. 2000). Nevertheless, the actual overcoming of these barriers would only result from the further step forward in the automation of software production made possible by the aforementioned development of the Unix-C programming language.

As we have seen, this language ensured easy portability, and therefore resulted in the virtual universality (or platform independency) of the products of programming labour, that is of software. Easy software portability was the outcome of the elimination of a considerable fraction of routine programming labour, known as *porting*. In turn, this was possible precisely because this language succeeded to a large extent in the aspiration that all languages shared, to render programmes virtually independent of the specific material structure of the machines that powered them. This led to the widespread adoption of Unix-C programming language in the late 1970s and early 1980s, which implied that automatic coding by means of a high-level language attained a far reaching universality (Ensmenger and Aspray 2002: 141). Moreover, high-level language programmers were now capable of writing programmes with no knowledge of machine-specific material architectures. In effect, computers controlled by programmes called *compilers* automatically translated the universal instructions spelt out by the programmer into machine-specific codes. Fundamentally, from the point of view of the productive attributes of wage-workers, the upshot of these material changes in the software labour process was that the general skill requirement for the bulk of programmers came down to a command of Unix-C programming language, which *could now* be attained through a process of formal education.

Needless to say, the knowledge of the specific material architecture of computers and components still remained a most important part of software production. However, it became the attribute of newly emerging specialised organs of the collective worker, which was the other side of the general degradation of the productive subjectivity of the programmer. In other words, this technical change entailed a process of internal differentiation of the software collective labourer, now composed of system

architects, designers, integrators, and plain programmers. This was largely facilitated by Unix-C structured programming, which, by enabling a more definite separation between conception and execution, allowed the aforementioned modularisation of (plain) programming. In turn, this provided an objective material framework for the development of the technical division of labour and therefore a more solid basis for the development of larger-scale projects that the expanding processing capacity of computers increasingly demanded.

In sum, a particular combination of determinations was in place in the late 1970s and early 1980s that would prove of utmost significance for the 'sudden' emergence of the Celtic Tiger. On the hardware side, the appearance and rapidly-growing computing capacity of the micro-processor meant that smaller, more powerful, and substantially cheaper computers and hardware components could be produced, which became accessible to a wider range of business users. Additionally, the PC was created, opening a new and potentially immense market for computers. This implied, in turn, a huge increase in global demand for software production at all levels. As for software, the appearance of Unix-C programming language emancipated capital from the burden of its dependency on the lengthy on-the-job-learning of *particularistic* productive attributes of programmers, thus opening the door to speedy developments in the newly required universal productive attributes in portions of the existing or future workforce *worldwide*. Software production, a labour process that was at the core of computers (and hence of the NIDL), was itself starting to be subject to NIDL dynamics, in the same vein as hardware production had been a little more than a decade earlier. Economic conditions were therefore ripe for capital to valorise through the exploitation of the adequately skilled but *relatively* cheaper programmer that could be produced *outside* industrially advanced countries. The first steps in the fragmented internationalisation of the productive subjectivity of the collective labourer of software production started to unfold.

Now, inasmuch as both high-level programming language development and software companies with the capability to undertake large projects were mainly of US origin, a fluent command of the English language was an important and general skill requirement demanded from the potential respective organ of the collective worker to be offshored. On the one hand, while high-level languages tended to evolve towards everyday linguistic forms, English was the language of most pioneer developers. On the other hand, we are dealing here with the international fragmentation

of a mostly *intellectual* labour process, where the technical division of labour is not *objectively* borne by the materiality of the system of machinery of large-scale industry. Instead, and similarly in this respect to the manufacturing division of labour discussed by Marx, the unity of the collective labourer is based on a '*subjective* principle' (Marx 1976: 501), that is, it has no other immediate material support than the direct relations that its, now internationally fragmented, members are able to establish. As a consequence, their generally direct social co-operation in the software labour process can only be established through a common spoken language. It is regarding other, more *specific* productive attributes that differences between potential locations arise.

Following the laws of motion of the NIDL, as described in Chap. 4, the offshoring of the software labour process certainly started with its simpler tasks, which can be roughly subsumed under the label of plain programming. Although the precise content of the work to be done and therefore the skills required surely differed by type of software, all of them involved a definite (yet varying) amount of those plain programming tasks. But the plain programmer is always an individual member of a team that itself is a collective sub-organ of the (wider) collective worker, whose unity actually establishes the organisation of the respective production process as a whole. The plain programmer is therefore always immediately associated with other more highly skilled software workers. As a consequence, the qualitative and quantitative articulation between these two general kinds of productive subjectivity (that is, degraded and relatively more expanded) determined the specific pool of skills—computer scientists, mathematicians, physical scientists, electrical engineers, systems analysts, programmers, and so on—that global capital demanded in each particular case. The specificities of Ireland as a national space of valorisation, determined as they were by the particular forms taken by its very early subsumption under the novel general forms of the international division of labour, would make it an ideal location in this regard.

As we have seen, Ireland's subsumption under the NIDL in hardware production entailed the presence of a specialised complementary pool of relatively more skilled workers, which was necessary from the very beginning—and was thereafter reproduced in an increased scale through formal education—for capital to exploit the larger, relatively unskilled, and cheaper Irish workforce involved in the initial assembly of computers. Among a broader spectrum of workers trained in scientific, engineering, and technical matters this complementary organ of the collective labourer

was largely and crucially composed of individuals trained in electrical engineering, one of the main reservoirs capital would initially draw on to meet the demand for medium-skilled programming labour. Thus, Ireland could provide software-producing capitals with the skills pool that was technically necessary to profit from the exploitation of the relatively cheaper plain programming labour that was the main driving force behind the relocation of capital's valorisation process in the sector. On these grounds, Ireland would become the earliest preferred site for the global relocation of programming labour, which would in turn sow the seeds for the subsequent impressive expansion of the more variegated and dynamic software industry that was one of the key drivers of the prosperity associated with the Celtic Tiger boom during the 1990s.¹⁵

Thus, as the international fragmentation of software production took off—slowly at first in the second half of the 1970s, but more rapidly during the 1980s—Ireland became the main site for the relocation of a wide range of related labour processes. The activities of foreign (mainly US) companies locating in the country during those years can be divided into the following categories (Sands 2005: 47): (1) *software development centres*; (2) *systems integration, sales and consulting, custom software development*; (3) *software supporting sub-contractors*; and (4) *manufacturing, logistics, localisation, porting, testing*. A closer inspection of the distribution of firms in each category reveals that a broad base of leading TNCs, embracing virtually all different types of software related activities, were already locating in Ireland in the 1970s and 1980s. Thus, although US software product companies such as Microsoft, Oracle, and Lotus did tend to offshore mainly manufacturing, localisation, and distribution functions, there were significant cases of foreign TNCs that appended software development centres to their manufacturing operations, particularly among hardware manufacturing companies (such as Digital and Ericsson), and telecommunications firms (such as AT&T and Alcatel) (Coe 1997: 220–1). Interestingly for our argument, Coe also reports that Ireland would come to be seen as an important UNIX development centre in Europe, with companies such as Motorola and ICL establishing UNIX programming centres (Coe 1997: 220). In our view, this speaks to the fact that the original main driver of the international fragmentation of software production was, fundamentally, the search for cheap plain programming (coding) labour, the simplest but necessary part of any software labour process which, however, must always be technically combined with the corresponding full range of more complex associated skills. As a matter

of fact, Coe notes that some kind of dual workforce was being created in Ireland, with two distinct cores: 'one of highly skilled development and localisation staff and one undertaking the less demanding and more repetitive manufacturing tasks' (1997: 223). Later on, this feature would turn out to be crucial for the development of a vibrant Irish indigenous software sector during the 1990s, which became one of the most visible distinguishing marks in debates over the Celtic Tiger phenomenon.

The sample compiled by Sands (2005) also suggests that the distribution of software TNCs in Ireland across those four categories changed during the 1990s, indicating that their FDI seem to have been more concentrated in the last category (that is manufacturing, localisation, distribution), which is also the least skill-demanding category. In effect, although the localisation component involved more skilled work, it represented about 30 per cent of jobs in a typical software firm—half consisting of language graduates involved in translation and the other half of graduate software engineers who actually adapt code for the various national markets (Coe 1997: 222). Yet, this low-skill bias of software TNCs has been to a large extent made up for by the emergence and expansion of a thriving indigenous software sector. Although in the late 1980s it was still composed of very small firms mostly focused on custom software development and other related services for the local market, during the 1990s their strategy changed to product development for export and firms became somewhat larger, but ultimately (despite normal concentration processes) remained small in the main, with the sector thus remaining a highly fragmented one (Sands 2005: 49–53). These smaller-scale operations usually require both low- and high-skilled workers, with the latter generally in a higher proportion *vis-à-vis* larger software development. The dynamism of this indigenous sector has therefore offered a compensatory source of demand for more skilled software labour in the face of the relative skill-downgrade of the more recent wave of relocation by TNCs.

So far our account of the genesis of Ireland's transformation into a Celtic Tiger has placed the accent on the country's integration into the NIDL through its active participation in the computer and software industries, the fundamental carriers of the far-reaching material revolution in the conditions of production that channelled capital's global restructuring of social labour. But those were certainly not the only industries that found in Ireland a convenient national territory for the exploitation of relatively cheap but suitably qualified workers, based on the international fragmentation of the productive subjectivity of the collective labourer.

Notably, an equally dynamic pharmaceutical industry developed from scratch from the end of 1950s and took off during the 1970s. Interestingly for our argument, it followed the same general pattern that governed the overall broader integration of Ireland into the NIDL, namely its participation in medium-complexity portions of industrial labour processes. Experiencing continuous employment growth beyond the 1970s (even after 2001 crisis), the Irish pharmaceutical industry accounted for approximately five per cent of the country's manufacturing employment in 2005, exporting USD17 billion in 2006 (16 per cent of Irish industrial exports and more than a six per cent share of global pharmaceutical exports). The sector's workforce is one of the highest skilled within Irish manufacturing (Egeraat and Barry 2009).

The Irish medical and precision instruments industry is another economic sector that has experienced considerable growth since the early 1970s, as a result of TNCs' increasing tendency to offshore manufacturing activities, in line with the general dynamics of the NIDL (Barry and Bergin 2013). Indeed, by 1970 Ireland's medical and measuring instruments exports already represented a substantial share (about 25 per cent) of Irish total manufacturing exports (see McAleese and Martin 1972: 630–1). According to Barry and Bergin (2013: 326), Ireland is actually 'the second larger exporter of medical products in Europe, after Germany'. Furthermore, it is noteworthy that the share of medical precision and optical instruments in total manufacturing employment in Ireland is quite high (7.9 per cent) *vis-à-vis* the European Union (EU) (2.9 per cent) (Addison-Smyth 2005).

Finally, during the 1990s the country benefited from an important wave of inward FDI in service activities, especially call centres, which has also been an expression of the more recent unfolding of the NIDL through the international fragmentation of back-office work (Breathnach 2000). Crucial factors in this development were Irish relatively low-wages, the existence of a modern telecommunications infrastructure (resulting from a complete overhaul in the 1980s), and the availability of language skills. Indeed, US firms (among which are IBM, Compaq, Dell, Citibank, Hertz, and Oracle) account for 70 per cent of call centres in Ireland and 80 per cent of the sector's total employment, of which a high-proportion (70 per cent) is female labour, and almost a quarter (23 per cent) are foreign workers. By mid-1998, total call centre employment amounted to 6000 persons, distributed in 50 operative centres mainly concentrated in the Dublin region. More broadly, the specific pool of skills demanded

from the respective collective labourer also fits into the *general* pattern of Ireland's subsumption under the NIDL, that is, a comparatively high presence of medium-level productive functions coupled with the requisite army of cheap workers bearing a degraded productive subjectivity. As Breathnach (1988: 310) reports, employment in teleservices includes a considerable level of skilled graduate-level work (in the region of 50 per cent), but also a great bulk of routine work requiring lower skill levels.

In sum, we can now appreciate how the Celtic Tiger originated. As a consequence of the very early economic formation of Ireland as a national space of valorisation, the conditions prevailing in the country when the microelectronics revolution started to take shape favoured its pioneer-like integration into the nascent NIDL in a definite set of industrial activities. More concretely, although it also included some traditional sectors, the development of the Irish specificity within the NIDL was especially shaped by the international fragmentation of the pharmaceutical, medical and precision instruments, computer and software industries. These are all industries that demanded a comparatively large proportion of medium- to high-skilled workers, which global capital could find in Ireland at a substantially lower cost than in advanced capitalist countries (yet which were nonetheless geographically close to key European markets), alongside the requisite cheap and disciplined less-skilled work that for technological or economic reasons could not be relocated elsewhere (for example, East Asia). Moreover, all these sectors, along with an incipient international back-office service industry, experienced strong growth in Ireland as an expression of NIDL dynamics, and each one of them contributed to the 1990s boom. However, as for the boom itself, our approach suggests that the peculiar occasion of Ireland's sudden entrance on the world stage as the Celtic Tiger, was fundamentally determined by the explosive increase in global demand for computers and IT products during that decade, as the incorporation of the novel forms of computer-based automation generalised across the globe. Although the new technical basis of the global production of relative surplus-value had already emerged in the early 1980s, the cyclical downturn of the world market in the first years of that decade delayed the manifestation of the accelerated growth of the key driver sectors of the, so-called, new economy. As the world economy resumed an expansive phase during the second half of the 1980s, those sectors took off and actually led the recovery of global accumulation. It is no wonder then that most accounts tend to date the beginnings of the Celtic Tiger phenomenon to 1987, but cannot agree on the specific mix of (externally-related) economic and political

factors that changed in those years in order to explain the boom (inter alia: fiscal stabilisation; tax cuts and government-size reductions; social partnership; belated natural convergence inhibited first by protectionism and then by ‘poor and wrong-headed fiscal policy’; state policies that raised the education levels of the workforce; an unexplained miraculous sudden growth in export markets and/or inward FDI; competitive devaluations of the Irish pound in 1986 and 1992; the formation of the single European market; or, lastly, EU structural funds) (see Breathnach 1998; Kirby 2004, 2010; O’Malley 2012). In our view, the reality is that the *fundamental ‘structural’ underlying causes or determinations* of Ireland’s ‘Tigerhood’ had already been laid out earlier by the specificity of Ireland’s subsumption under the NIDL as discussed in this chapter. In this sense, no profound change occurred *circa* 1987. The point is that the cyclical conjuncture of the world economy in the late 1970s and early 1980s meant that the effects of the structural transformations would remain latent for some years. Likewise, we can only tentatively suggest here that the explanation for the *end* of the boom (that is, the transformation of the Celtic Tiger into a Eurozone crisis economy) should also be sought in the twofold dynamics of the further development of the NIDL [the appearance of new competitors with cheaper and more disciplined but adequately-skilled labour-power in key sectors in Central and Eastern Europe and (South-)East Asia], and of the further cyclical development of the long-standing crisis of general overproduction of capital on a world scale.

CONCLUSION

In this chapter, we have offered a historical sketch of the long-term developmental trajectory of capital accumulation in the Irish national sphere of valorisation. We grounded it in the essentially global dynamics of the accumulation of the total social capital, through the production of relative surplus-value and changes in the modalities of the international division of labour they entailed.

As we have seen, from its genesis as a politically-autonomous national space of valorisation up until the crisis of ISI in the late 1950s, Ireland had been subsumed under the CIDL on extremely weak foundations, which in turn are the expression of a modest and declining flow of ground-rent into the national territory. This led to the constitution of what proved to be a long-standing and resilient determination of Ireland as a reservoir of latent and stagnant surplus population for the needs of global capital

accumulation, which would be reproduced under changing historical forms. This determination gives unity to the first great phase of capitalist development in the country.

Premised on this 'chronic' historical condition that redounded in the availability of a mass of cheap yet adequately skilled labour-power and a strategic geographical location, the Irish national space of valorisation experienced a pioneering subsumption under the NIDL in the making from the 1950s. These conditions constitute the second great phase of capitalist development in the country, and would give the integration of Ireland into the NIDL an idiosyncratic shape. In the first place, from a very early phase the Irish process of capital accumulation was marked by a pattern of specialisation of its productive structure that revolved around, what was then, a key sector of an emerging microelectronics-based automation of capitalist large-scale industry (computers and hardware first in the 1970s and 1980s and software a decade later). In the second place, unlike the late-industrialisation experiences of the East Asian Tigers, the subsumption of Ireland under the laws of motion of the NIDL did not start with the simplest organs of the collective labourer of large-scale industry. Instead, from the very beginning capital could profit in Ireland from the exploitation of the cheaper labour-power of medium-complexity productive attributes available in that national sphere of valorisation (alongside the requisite mass of unskilled workers it could also find there). These are the historical conditions that eventually came into fruition in the 1990s and which therefore underlay the impressive economic expansion associated with the Celtic Tiger boom.

At first sight, this phase of prosperity seemed to imply that Ireland had definitively overcome its historical condition as a reservoir of relative surplus population for the global accumulation process. However, the Celtic Tiger's recent crisis seems to suggest that one should not rush to conclusions and that Ireland's subsumption into the NIDL might not rest on very solid foundations. On the one hand, the very transformative tendencies of the material forms of production of relative surplus value that underlie the NIDL constantly make possible the integration of ever newer sources of even cheaper and more compliant but suitably-skilled labour-power. On the other hand, those very same tendencies revolutionise the means of communication and transport and thereby lead to the gradual erosion of any competitive advantage in geographical proximity to European markets that has also played its part in the peculiar forms taken by Ireland's subsumption under the NIDL.

NOTES

1. See the respective Chaps. 2 and 3 for an extended account of the determinations behind the incorporation of new territorial sources of raw materials for global capital accumulation and the consequent configuration of the 'classical' international division of labour.
2. See Chap. 2 and Starosta (2010) for the determination of small industrial capitals and their systematic release of surplus-value in circulation.
3. Surprisingly, Kirby (2010) quotes these figures as evidence of the 'initial success' of the new government's industrialisation policy.
4. Between 1932 and 1938 exports were also affected by the Economic War with Britain that followed the Irish government's decision to stop payment of land annuities owed to the British Exchequer and which had originated during the land reform period.
5. See Marx (1976: 794–802) on the different modes of existence of the relative surplus population resulting from the unfolding of the general law of capital accumulation.
6. See Chap. 4 for a further examination of these issues.
7. Although from an early stage the Irish working class lacked the relevant 'particularistic' technical skills, they possessed the 'universalistic' productive attributes (including flexibility and versatility) derived from a generally good level of basic education (Breathnach 2007: 136). As for the former particularistic productive attributes, note that most jobs in the newly emerging sectors initially were either 'unskilled' or, in a minority of cases, were 'semi-skilled' (Barry and Brunt 2002; Breathnach 1993); in both cases, those attributes could be more or less rapidly developed with 'on-the-job' training.
8. The government received £40.8 million plus a £6.5 million grant between 1949 and 1952, but total net capital inflow during those years amounted to £106 million (McAleese 1972).
9. Some authors place this low corporate tax regime on an equal footing with cheap but adequately-skilled labour power as the fundamental reason for the inflow of FDI into Ireland (Barry 2004: 16). O'Hearn (2003: 37) goes as far as considering it as essential to the inflow of FDI by TNCs, with an available pool of relatively low-waged IT experts reduced to a factor of secondary importance, since their wage bill is relatively low compared to other costs. These views fail to ask about the source of social wealth that can sustain such a low corporate tax without eroding the normal fiscal base of the capitalist state. In fact, O'Hearn unwittingly offers clues to this question. As he notes, the low corporate tax regime went hand in hand with a drastic and regressive rise in taxes on incomes and expenditures which, moreover, was not directed towards spending in basic social

programmes (O'Hearn 2003: 47–50). Thus, the levels of state spending on health, social housing, and education were among the lowest in Europe in the mid-1990s, with many social services run down. But this can only mean that the low corporate tax rate regime is only sustainable at the expense of undermining the normal conditions of long-term reproduction of the Irish working class—that is, at the expense of the purchase of labour-power at its full value. In other words, the low corporate tax regime seems to be but a concrete form of the exploitation of relatively cheap labour-power and not an independent factor in attracting FDI.

10. Concerning the IDA in particular, it is noteworthy that even those who see it as a planning agency that autonomously steered the form of integration into the NIDL recognise that in key cases the selection of (eventually successful) target industries usually follows a prior wave of uninvited inflows of FDI. Thus Barry (2004: 18) narrates that 'having attracted several computer and components firms in the 1970s, for example, and being favourably impressed by their performance in situ, electronics and computer software were among the industries listed as meeting these criteria in 1983, when an all-out campaign to develop Ireland as a major European location of such activities began'. Similarly, the turn to a deliberate 'export-oriented strategy' in Korea occurred *after* the *unexpected* impressive performance of exports towards the end of the 'inward-looking' First Five-Year Plan, which took even policy makers by surprise (Grinberg 2011).
11. Strictly speaking, as the experience of late industrialisation in Taiwan shows, it is possible for a mass of small capitals to turn into the active immediate subjects of the valorisation process on the basis of their subsumption under the NIDL. However this possibility must be predicated on a much cheaper labour-power and more brutal conditions of its consumption (that is, exploitation) than the historical conditions of reproduction of the working class prevailing in Ireland allowed. As for the Korean experience of generating national champions (that is, the *chaebols*), it must be noted that those large industrial conglomerates had already been created *before* the turn to 'export-oriented industrialisation' (Krause 1997: 138; Kim 1976; Woo 1991).
12. Although it is true that the share of exports to the UK tended to decline, it still reached 63.1 per cent in 1971. By contrast, the share of exports to the EEC reached only 12.4 per cent (other OECD countries took 13.8 per cent and all other areas 8.1 per cent) (McAleese and Martin 1972: 616–7). The composition of exports by destination was therefore very varied.
13. By 1980–1981 the occupational structure of the electronics industry in Ireland was, in international comparative terms of the complexity of labour-power, halfway between that prevailing in the USA and that in the, so-called, East Asian Tigers (Drew and Foster 1994; see also Barry and

- Brunt 2002; Breathnach 1993). On the other hand, compared with the average Irish manufacturing occupational structure, the electronic industry is relatively more skilled.
14. PC assembly operations peaked in 1998 (when measured by employment figures) and started to shrink thereafter, so that by 2002 the only system assemblers remaining in Ireland were Dell and Apple (with the latter heavily downsized) (van Egeraat and Jacobson 2004: 813–14).
 15. Evidence of this lies in the fact that, even allowing for a threefold overstatement of Irish figures due to transfer price fixing by TNCs to benefit from the country's low corporate tax policy, Ireland's software exports in 1990 were still seven times greater than those of Israel or India (Dossani and Kenney 2008: 56).

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New International Division of Labour and Differentiated Integration in Europe: The Case of Spain

*Greig Charnock, Thomas F. Purcell,
and Ramon Ribera-Fumaz*

The tendency toward a new international division of labour (NIDL) intensified with the crisis of general overproduction that engulfed the advanced capitalist countries in the 1970s. From the 1980s in those countries, trade union power was defeated, industries were privatised, labour markets were

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G. Charnock (✉)
Politics, The University of Manchester, Manchester, UK

T.F. Purcell
Department of Politics and Applied Global Ethics,
Leeds Beckett University, Leeds, UK

R. Ribera-Fumaz
Internet Interdisciplinary Institute, Universitat Oberta de Catalunya,
Barcelona, Spain

segmented, and unemployment rates increased, while public spending on health and education diminished. The result has been a marked differentiation in the conditions of reproduction and exploitation of the working class *within* as well as across national borders—while, in general, average real wages have stagnated and income inequality has deepened. Iñigo Carrera (2013: 71–2; also Chap. 4) explains how this process unfolded in Europe through a form of differentiated integration:

the gradual formation of a new national ambit of accumulation—and hence of a new national state—[is one] that starts by integrating formerly autonomous national spheres into a supranational organisation. The European Union includes national working classes bearing different histories with respect to their productive subjectivity and, therefore, with respect to the conditions in which they reproduce themselves. Under the concrete political form of an extended equality among their citizens, some countries of the union came to be suppliers of relatively cheap labour-power to the capital located in others. At the same time, the relative dissolution of each national unity allows an exacerbated regional and local differentiation in the internal reproduction of labour-power ... Now, with an internal market that transcends [immediate national unity] capital maximises its accumulation on the basis of the regional and local differences in the reproduction of labour-power.

The more recent crisis of general overproduction that erupted with the collapse of large US investment banks in 2008, and which dragged much of the world's national economies into recession by 2009, has not only confirmed that a pattern of uneven development between countries exists in Europe, but also how crisis serves to further reinforce the process of internal differentiation of the reproduction of labour-power, particularly under the conditions imposed by European Monetary Union (EMU) and the adoption of a single currency, the euro.

While productivity increases surpassed wage growth in countries such as Germany between 1999 and 2007, wage growth and unit labour costs in the European South (including Ireland) outstripped the growth in labour productivity, which rose only sluggishly, stagnated, or (as in the cases of Italy and Spain) actually declined (Cambridge Econometrics 2011: 10; ILO 2013: 15–16). Economic growth and the expansion of social consumption across the European South during the 'boom' of the early- to mid-2000s rested instead upon the expansion of corporate and

household debt, fuelled by an accelerated inflow and recycling of fictitious capital from the northern ‘core’ that was encouraged by low interest rates, banking deregulation, the high profitability of speculative urban and infrastructure construction and development (often linked to tourism), and the profitability of key non-tradable sectors in countries like Greece, Ireland, and Spain. A direct response to the ‘Great Recession’—the sovereign debt problem arising out of banking bailouts and suchlike—across the EU has, as a consequence, consisted of the imposition of fiscal discipline and social austerity (Burnham 2011). Amidst rising unemployment and precarity across the Eurozone,¹ states have further sought to re-adjust national competitiveness by means of, so-called, internal devaluations (that is, reducing the cost of labour-power)—thereby deepening the structural differentiation of labour-markets within their respective national spheres.²

Much as Friedenthal and Starosta’s contribution to this book asserts, it is of crucial importance that we understand the longer-term historical role played within the NIDL by relatively late industrialising countries if we are to grasp the essential relation between global transformations and (uneven) national development—and especially if we are to explain why and how some countries and regions are today bearing the brunt of crisis, austerity and internal devaluation in a unified Europe. As we will see in the case of Spain, it is precisely on the material basis of its full integration within the NIDL from the 1970s to provide a relatively cheap source of labour-power in geographical proximity to the European Economic Community’s (EEC) market that the conditions of the reproduction of the working class were shaped, and it is this historical component that prefigured the process of differentiation within and across its borders since then—a process compounded and deepened by successive crises and the development of the NIDL itself since the 1970s.

THE *BACKWARD* CHARACTER OF CAPITAL ACCUMULATION IN SPAIN PRIOR TO THE NEW INTERNATIONAL DIVISION OF LABOUR

At first glance, there are perhaps reasonable grounds for comparison between the economic histories of Spain (and other southern European spheres of accumulation) and Latin American counties, since both have a history of late industrialisation on the basis of some version of a strategy of import substitution (ISI). In the Spanish case, after the fascist victory in

the civil war (1936–1939), the national sphere of accumulation was largely closed to foreign imports of commodities as part of an especially restrictive, autarkist ISI policy.³ Much as in Latin American countries at that time, the Spanish state imposed quantitative restrictions on imports, foreign exchange controls, a fixed and overvalued exchange rate, it controlled capital markets, and centralised the regulation of foreign trade—eventually administering it through a multiple exchange rate system. With such protectionist measures in place, the Franco regime created the Instituto Nacional de Industria (INI) in 1941; a state holding company charged with promoting national industrial development in key sectors—initially energy, iron, and steel production. Under ISI Spain began to industrialise, with average industrial growth rates in the 1950s four times higher than in the 1940s. By 1960, industry was contributing 30.93 per cent of GDP (Prados de la Escosura 2003: 584), with the INI having secured state monopoly control in over 60 national enterprises and across a range of sectors by the mid-1960s, including new sectors of national interest such as automotive manufacturing.

Yet there were always important differences between Spain—and other southern European countries that adopted ISI—and Latin America. One of the insights developed in the work of Iñigo Carrera (2007, 2013) concerns the specificity of the process of capital accumulation in countries where the relation between the total global social capital and the national sphere is politically mediated by ISI policies. This has historically been the case in ‘resource rich’ Latin American countries where the appropriation of ground-rent is mediated by state policies and institutions that transfer resources from the primary sector to the rest of the economy (see Chap. 3). The fundamental significance of national accumulation processes based upon the appropriation and recovery of ground-rent by the state, landlords, and (both national and global) industrial capitals is that the development of the forces of production proceeds on a limited, ‘backward’ basis, relative to world market norms. The appropriation of ground-rent compensates for higher production costs incurred by smaller, backward capitals, so they can nonetheless valorise at the general rate of profit. In Spain, however, given the absence of a sufficient magnitude of ground-rent and the limits inherent in the systemic payment of labour-power below its value (which was the primary basis for the valorisation of capital in the early years after the Civil War) ISI was always doomed to failure. The forms of compensation that extended the life of ISI up to the late 1960s were instead strongly dependent upon the expansion of capital accumulation outside Spain, and,

as we shall see, in northern Europe in particular—which, of course, was drastically restricted in the general crisis of overproduction of the 1970s.

The primary basis for the valorisation of domestic capital in Spain prior to the 1960s was certainly the purchasing of labour-power below its value (Molinero and Ysás 2003; Vilar Rodríguez 2012: 7–8). While nominal wages increased slowly between 1939 and 1951, the rate of increase was maintained below that of wage-goods prices, resulting in the diminution of purchasing power for the majority of the population. In 1956, for example, the estimated real value of wages was between 15 and 35 per cent below the pre-Civil War level, with an associated low per capita consumption of staple foods (Lieberman 1982: 188). Nevertheless, by the end of the 1950s the limits to rapid industrialisation on the basis of an extremely restrictive version of ISI were beginning to reveal themselves—and notwithstanding the additional compensatory benefits of bilateral aid agreements secured in this period (of note, the 1953 Pact of Madrid struck with the USA). By then, the state had exhausted its foreign exchange reserves, could no longer finance a spiralling budget deficit, and nor could it stave off workers' demands for wage increases in the context of high inflation.

The implementation of the 1959 Stabilisation Plan by Francoist technocrats—a turning point for most economic historians of this period—was a necessary response to a looming national crisis that expressed the limits to autarky. The Plan consisted of public austerity to attack domestic inflation coupled with the controlled liberalisation of imports. Multiple exchange rates were unified and, in Spain's joining of the Bretton Woods monetary system in 1961, the peseta was devalued and became convertible on international markets—thereby boosting the export capabilities of some national industries. Most significantly, however, new foreign investment regulations permitted up to 50 per cent ownership in Spanish firms, with no limits imposed on strategic sectors such as steel, textiles, shoes, leather, machine tools, and construction. As a result, between 1958 and 1972, Spain's most important local capitals expanded, but in turn (with the exception of the shipbuilding and electricity sectors) became heavily dependent upon FDI and foreign technologies in what constituted a later phase of the classical international division of labour (CIDL), in which foreign capitals invested in local capitals whose turnover cycles were largely opened and closed within the protected Spanish market.

The high levels of growth that Spain enjoyed in the 1960s were therefore based upon the continued reproduction of small industrial capitals (see Iñigo Carrera 2013: 136–8) producing for the domestic market. In

the absence of a large magnitude of inter-sectoral transfers from primary materials exports that sustained ISI in Latin America, the Spanish state found that it could only sustain ISI beyond the 1950s due to three developments that brought into sharp relief the necessary relation between the national and the global (especially northern European) spheres of accumulation (Charnock et al. 2014: 48–50). First, the inflow of remittances from millions of Spaniards who left the country to work abroad (under different variations of the West German *Gastarbeiter* arrangement) had the effect of allowing Spanish households to consume wage-goods even when the state fixed wages below socially necessary levels (to the benefit of the valorisation of small industrial capitals). Second, flows of value from outside the national sphere of accumulation that arrived in the form of revenues from mass tourism had the combined effect of allowing Spanish workers employed (formally and informally) in the tourism economy to meet their subsistence needs, of expanding the domestic market, and, importantly, of allowing the Spanish state to finance its current account and balance of payments deficits. The third development was the arrival of restricted, incipient flows of FDI oriented toward production for the domestic market. In addition to the lowered costs of production provided by the exploitation of low-skilled, surplus labour-power in and from late industrialising countries, the rise in FDI from the 1960s can also be explained by the benefits that accrued from the importation of patents and machinery from abroad. States like Spain could establish a basis for the expansion of domestic industries by facilitating the import of technologies deemed obsolete by world market industry; that is, means of production that could no longer maintain the productivity of labour relative to new means of production and/or in new configurations of the labour process in specific branches of production for the world market, but which still served to raise the productivity of labour within the restricted scale of the protected domestic market, and so to raise the rate of profit for those small industrial capitals that put them to use in their labour process (the basis of, so-called, secondary ISI—see Phillips 2004: 43–4).

By 1974, however, Spain eventually did experience the onset of a global crisis of overproduction in the form of a crisis of ISI. The conditions were ripe, then, for Spain to assume a position within the emerging NIDL based upon the following conditions. First, that it offered foreign capitals the opportunity to relocate parts of the production process to a low-wage labour market,⁴ and an economy in which internal demand was rising and obsolete industrial technology and patents could be profitably recycled

by foreign industrial firms. Second, and after the state's watershed agreement with the Ford Motor Company (discussed below), which marked the beginning of a transition to the export-oriented subsumption of the national sphere of production to the NIDL, Spain offered foreign capitals geographical proximity to the expanding European internal market—a prospect that would be completed with the country's full accession to the European Community (EC) in 1986.

THE INTEGRATION OF SPANISH INDUSTRY WITHIN THE NEW INTERNATIONAL DIVISION OF LABOUR: THE CASE OF THE AUTOMOTIVE INDUSTRY

From our perspective, an analysis of the Spanish automobile industry illuminates the basis upon which Spain was inserted into the NIDL from the 1960s, and allows us to examine the relation between global transformations and uneven national and regional development. Spanish automotive production was transformed in the 1940s under early ISI and the auspices of the INI, which established Sociedad Española de Automóviles de Turismo (SEAT) with a 51 per cent capital share in 1948 (the Italian firm Fiat providing the patents in return for a seven per cent initial share). In 1951, Fabricación de Automóviles SA (FASA) was created in Valladolid after an agreement was struck with the French producer Renault to produce FASA's vehicles under licence, with 70 per cent Spanish capital (mainly from Banco Santander), thereby establishing an effective duopoly in Spanish production (Catalan 2010: 211). By 1962, these firms were specialised in small vehicle production under Italian and French licences, and both fared well in the boom of the 1960s. By 1970, when the EEC reduced tariffs on Spanish imports, SEAT was Spain's leading export firm and its flagship 'national champion'. Yet, in García Ruiz's (2001) estimate, the development of the car industry was predominantly fed by rising internal demand up until 1967—the same year in which the state was forced to devalue the peseta in the face of a growing balance of payments deficit, the onset of rising inflation, and a brief recession that defined the limits of profitability on the basis of production solely for the domestic market (Román 1971: 86). Realising that the domestic market had reached the limits of its development, Fiat and Renault opted to permit exports of cars from Spain produced under their licence but demanded a greater share of SEAT and FASA, respectively, in return. However, the picture that had emerged by then was one of an industry that was technologically backward

and increasingly dependent upon foreign investment and technology. Production by these firms during the 1960s and into the 1970s was characterised by small economies of scale, short production series, high labour intensity, technical backwardness, and the manufacture of products that were antiquated in relation to world market standards (García Ruiz 2001: 145; Ramos Barrado 1986). Outside the duopoly, the growth of an auxiliary components industry consisting of many small capitals was sustained largely by the state's insistence upon a 90 per cent quota of Spanish-made parts.

By the early 1970s, the limits to the ISI-based expansion of the Spanish car industry were being felt. Faced with increasing labour costs, SEAT's profits declined from a 4.2 per cent margin in 1967 to 2.2 per cent in 1971 (Catalan 2010: 216). At this time, the Ford Motor Company was also in negotiation with the Spanish state to invest USD 300 million in a new assembly plant in Almusafes, Valencia, in return for several concessions (Studer-Noguez 2002: 92–3). By 1972, in what are known as the Ford Decrees, the state agreed, among other things, to relax the quota on Spanish-made parts, to decrease tariffs on imports of Ford components, and to exclude imports from other foreign firms. For its part, Ford's aim was to assemble the small Fiesta car in Spain for the EEC market, taking explicit advantage of a flow of suitably qualified, guest-workers' labour-power now returning to Spain in the context of the European recession—'a welcome nucleus of already trained men' (Turner 1977: 41)—and saving on the cost of producing cars in the USA for export in short runs (Doz 1986: 72–3). Production of the Fiesta in Valencia commenced in 1976. The arrival of Ford therefore heralded the beginning of the transition toward a full insertion of the national process of accumulation into the emergent NIDL, based upon the export-oriented manufacturing of low-cost small vehicles of relatively lower technological complexity, and taking full advantage of the relatively cheap, adequately trained nucleus of labour-power then available to it.

The global crises of the 1970s impacted significantly upon the structure of the global car industry. Since then, production has been concentrated in a decreasing number of producers facing problems of over-capacity in European, Japanese and US markets—even in periods of growth. As the NIDL developed on the basis of transformations in the production process associated with *systemofacture*, and in the face of heightening global competition,⁵ Spain became an attractive export base for Ford's

global competitors, precisely on the basis of offering relatively low-wage labour capable of adapting to labour processes of relatively low complexity (Rubenstein 2001: 344). Following Ford, and the state's, relaxation of the Spanish-made components quota to 60 per cent for all producers in 1979, General Motors established a plant near Zaragoza to produce the Opel Corsa (launched in 1983). This, together with the effects of the crises of the 1970s, was disastrous for SEAT, whose market share in Spain fell from 51 per cent in 1973 to 26 per cent by 1980 (Catalan 2010: 222).⁶ At the height of recession in 1981, Fiat relinquished ownership of SEAT back to the INI and negotiations commenced with the German producer Volkswagen that culminated in the transfer of 51 per cent of the company in 1986—marking the end of a period in which foreign capitals' presence in Spain was mainly on the basis of producing obsolete car models for the domestic market (Álvarez Gil and González de la Fe 1997).

From this moment, the position of the Spanish automotive industry became, in a sense, *intermediate*: its position within the NIDL was that of a producer and exporter of equipment and components of lower complexity, and an importer of higher value-added components (Catalan 2010: 222; Ramos Barrado 1986).⁷ This position was further consolidated from the 1980s and into the twenty-first century as, confronted with rising production costs and falling demand, the global automotive industry's response to the crises of the 1970s was to seek to lower costs by adopting leaner production technologies and reducing the minimum efficient scale of production through the introduction of automated production technologies—mainly industrial robots and computer-aided manufacturing (see Grinberg 2013: 181–2). This transformation entailed the geographical dispersion of different moments of the production process and the expansion of networks of labour-intensive production of components by small-scale auxiliary suppliers. Unsurprisingly then, the takeover of Spanish automotive producers in the 1980s proceeded on the basis of the transformation of technologies and organisation of production in line with recent revolutions in the labour process (so-called Toyotisation, after the Japanese producer) (see Álvarez Gil and González de la Fe 1997; Pallarès Barberà 1997)—a process mediated by the then Socialist government's further relaxation of the legal restraints on foreign capitals' restructuring of the labour process and the quota of Spanish-made components.

Since the 1980s the structure of automotive production within Spain has become markedly differentiated, and in a manner consistent with the

international fragmentation of the collective labourer in general under the NIDL—as explained below. From the 1980s there has been an expansion in the number of small capitals acting as auxiliary suppliers to foreign-owned capitals engaged in large-scale final assembly for export. The former produce products of low technological complexity, while the latter involve *relatively* more technologically complex, higher productivity labour processes (see Aláez Aller et al. 2009; Pallarès Barberà 1997, 1998; Truett and Truett 2001). In the latter’s original equipment manufacturing (OEM) plants, capitals are compensated for paying higher wages due to relatively high levels of labour productivity; while wages in the auxiliary sector—in which a far lower proportion of workers are unionised—have been relatively low (Banyuls and Llorente 2010). The 2009 crisis and ensuing recession has further consolidated the Spanish automotive industry’s position within the wider international and European division of labour—although it has also exposed it to further competitive pressures from the accession countries of central and eastern Europe, such as Hungary, where small cars and light commercial vehicles can be produced using relatively cheaper labour-power with sufficient capacity to work with relatively more complex technological processes than can be found in Spain (Minetur 2011: 42; also Aláez Aller et al. 2009: 51). Notwithstanding such pressures, Spanish automotive producers (who contributed 10 per cent of GDP and employed 9 per cent of the active labour force in 2013—PWC 2013: 39) increased output and direct employment since 2009, albeit on the basis of their lean, flexible reliance on components supplied by a mass of local small capitals (Anfac Research 2014; Galindo 2013). Indeed, the crisis has deepened the differentiation of capitals within the Spanish automotive industry, and to the extent that, firstly, producers have expanded their outsourcing practices in an increasing number of design, production, logistics, and assembly functions to auxiliary suppliers to reduce costs (Minetur 2011: 49).⁸ Secondly, this process has accentuated the hierarchical relation between different tiers of components-supplying capitals within Spain: (1) those that belong to TNCs; (2) those small components manufacturers who have responded to competitive pressures by increasing their scale of production and upgrading technological processes; and, (3) those that have been unable to adapt to increased competition and whose reproduction is therefore at risk (Minetur 2011: 49–50)—further deepening the differentiation of the conditions of the reproduction of labour-power within the automotive industry.⁹

THE NEW INTERNATIONAL DIVISION OF LABOUR
AND THE DIFFERENTIATION OF CAPITALS
AND OF THE CONDITIONS OF THE REPRODUCTION
OF LABOUR-POWER IN SPAIN

The account above of the development of the Spanish automotive industry within the NIDL, reflects the general development of industry in Spain since the 1970s. To understand this development, it is crucial to bear in mind how state managers in Spain have struggled to create the necessary conditions for the expanded reproduction of capital since the crises of that decade and the political transition to a liberal democratic form of state. By 1977 the first civilian government in Spain had enacted a series of drastic economic policy measures, including curtailing the money supply, reforming labour legislation, and introducing wage controls. This occurred in the context of high interest rates across the classic capitalist countries, and the monetary squeeze that constituted part of a global disinflation strategy—the first move having been made by the US Federal Reserve and the, so-called, Volker shock of 1979. As is well documented in IPE literature, this marked an incipient process of economic and political restructuring that was ideologically justified by a new social realism and the championing of the free market (that is, neoliberalism). At the same time, the formal process of European regional integration gathered momentum. In this period, states across the European south had to find some way to confront the problems of falling profitability, high inflation, de-industrialisation, rising unemployment, and public deficits (Hopkin 2012: 38; Karamessini 2008: 514)—problems for which a single European market and monetary union were seen as the solution by successive governments.

Between 1977 and 1988 Spain's balance of payments steadily improved and inflation decreased (Boix 1995: 35), but at the cost of high numbers of closures of credit-dependent industrial firms and—under the Socialist government's industrial reconversion, or cleaning up programme (*el saneamiento*)—a total loss of some 700,000 manufacturing jobs (Lieberman 1995: 281–3). After the removal of restrictions on temporary contracts in 1984, fixed-term employment rose dramatically, reaching 30 per cent of total employment in Spain by 1991 (Jimeno and Toharia 1994: 18). From 1979 to 1986, real wages experienced a sustained decline (López and Rodríguez 2010: 148). Thus, the burden of transition toward a fully liberalised market and Spain's full insertion into the NIDL was

placed squarely upon the Spanish working class (Etxezarreta 1991: 40). The rate of profit continued to rise throughout the 1980s up until the recession of 1992 (Nieto Ferrández 2007: 200). Meanwhile, according to Viñals et al. (1990: 161), labour costs in Spain by 1985 were about 43 per cent lower than in other industrialised countries, with the vast majority of new employment being on the basis of flexible contracts. At the same time, the growth of Spain's service sector and its recently territorially decentralised public sector—in the form of the 17 Autonomous Communities, which drew many women into employment in education, health and cultural sectors—began to grow disproportionately to manufacturing (Santos Preciado 1997: 155). From this point the markedly segmented character of the labour market (Vilar Rodríguez 2012: 21–2) served to reduce the membership base of the trade unions and to weaken their capacity to resist the downward pressures on wages and working conditions (Banyuls et al. 2009: 255; Boix 1995: 38).

Crucially, during this period levels of investment in industry remained relatively low; a problem exacerbated by a domestic banking crisis between 1977 and 1985 that restricted liquidity (and which culminated in the centralisation of 73 per cent of banking activity in the hands of the Big Seven large financial groups by 1984) (López and Rodríguez 2010: 154). Unemployment rose to 22 per cent by 1984, and was accompanied by the emergence of a huge informal economy as workers strove to cope with layoffs associated with the *saneamiento* (Benton 1992). The terms and conditions of work in industries such as textiles, footwear, toys, and other light manufacturing sectors were particularly affected by newly emergent subcontracting relations that transformed the spatial organisation of production in Spain and, with it, the structure of the Spanish labour market (see Santos Preciado 1997). The devaluations of capital and labour under industrial reconversion had, in short, provided a fresh supply of low-wage labour to Spain's small capitals and on the basis of flexible work contracts (90 per cent of all annual contracts issued from the mid-1980s, according to Martínez Lucio and Blyton 1995: 351), competing to supply to normal, foreign-owned capitals engaged in larger-scale production.

Since the 1990s Spanish industrial production has continued to be concentrated in a mass of small capitals whose development is either restricted to the scale required for local markets, or else is dependent upon their ability to survive in competitive, geographically-concentrated markets supplying mostly foreign-owned normal capitals with inputs of low- to

intermediate-technological content (Cabrero Bravo and Tiana Álvarez 2012: 83; European Commission Staff 2015: 16). In terms of scale, for example, between 1990 and 1996 only 25.2 per cent of the 33,203 new manufacturing plants established in Spain had more than nine employees (Arauzo-Carod and Segarra-Blasco 2005: 150–1).¹⁰ In sectors at the vanguard of the transformation of automation processes upon which the NIDL has been dependent (see Chap. 4), Spanish capitals have, in general, failed to develop in step with world market norms (Charnock et al. 2014: 70–2), notwithstanding the, so-called, multinationalisation of Spanish manufacturing firms from the 1980s (cf. Holman 1996).¹¹ The inflow of FDI in the 1980s did little to encourage investment in productivity by the majority of Spanish firms. Inter- and intra-industrial trade continued to be characterised by the export of goods of inferior quality to those being imported—a problem attributable to the pervasive use of relatively backward technologies (Martínez Zarzoso 1999). By 2005 Spain had invested just 1.03 per cent of GDP in R&D—half the average for the EU-15 (Mathieson 2007: 22).

The fifteen-year period following the 1992 recession in Spain nonetheless witnessed the aggressive expansion abroad of a select number of domestic banks and firms, to the degree that in 2005 the volume of outward FDI exceeded inward investment for the first time in Spain's history (Fernández 2011: 151). The bulk of Spanish direct investment abroad went into Latin America (see Santiso 2007). The basis for the expansion of some firms after the mid-1990s lay in the state's proactive role in the centralisation and concentration of capital in specific non-industrial sectors. The, so-called, big five (Endesa, Repsol, Telefónica, and the two major banks, BBVA and BSCH) were the main beneficiaries of state protection in the 1990s, and by 2004 shared more than 60 per cent of the net profits of the 35 companies that make up the Spanish stock market index (IBEX) (Etchemendy 2004: 648). By the mid-2000s, therefore, Spain's largest and most profitable capitals were concentrated not in general manufacturing sectors, but in sectors such as banking, construction, utilities, public services, retail, and hospitality. As we have explained, the relatively backward development of industrial capitals in Spain can be explained by their restricted production for the domestic market, on the one hand and on the other, on a scale required to compete in supply networks for foreign capitals (see Arocena 2004). Spain's most profitable capitals, on the other hand, reached the degree of concentration required to compete as normal capitals at the scale of the world market, and with the support of the

state—albeit in specific sectors in which these capitals mainly opened and closed their valorisation processes abroad.¹²

One significant result of the outward internationalisation of certain Spanish capitals concerns the external debt that weighs heavily upon the state today. As the accumulation cycle intensified in Spain during the boom that ended in 2009, the state used growing tax receipts—especially from construction and housing—to support acquisitions abroad by Spanish firms under the terms of, so-called, goodwill payments (Chislett 2007: 4). Between 2005 and 2007, when the state boasted a current account surplus (generated from taxes collected during the height of the property boom), Spanish companies spent a total of €140 billion on domestic and overseas acquisitions (Royo 2009: 20–1). By the 2000s, therefore, Spain could boast globally competitive, internationalised capitals. Yet, at the same time, its domestic industries increasingly relied upon low-wage, low-productivity, informal labour-power producing either for local markets or in highly competitive and low-profit supplier networks. The uneven development of the branches of production in Spain was fed by large inflows of money capital that supported the internationalisation of select Spanish companies, unprecedented levels of growth in the Spanish construction sector,¹³ and rising levels of debt-dependent private consumption.¹⁴

CRISIS AND THE COMPOUNDED DETERIORATION AND DIFFERENTIATION OF THE CONDITIONS OF THE REPRODUCTION OF LABOUR-POWER IN SPAIN

A national process of accumulation reproduced through the expanded consumption of imports over the production of exports, with stagnant or deteriorating productivity, but which grows at an annual average rate of 4.4 per cent for almost ten years, can only reproduce on the basis of some form of compensation, and, in the Spanish case, this was debt. The cycle of growth in Spain prior to 2008 rested upon huge inflows of fictitious capital from abroad (and especially from the European ‘core’ through the covered bonds market linked to mortgage-debt refinancing)—speculative investment that was switched into Spain through its savings and commercial banks into the then especially profitable construction sector and real estate market.¹⁵ For much of the working class in Spain, expanded consumption during the pre-2008 boom depended upon rising levels of private debt and, often, upon cashing in the equity from rapidly rising house prices (López 2007: 219). The ratio of resident household debt to

GDP in Spain grew from under 55 per cent in 2000 to over 90 per cent in 2010,¹⁶ while estimated net household debt as a percentage of disposable income grew from 85.97 per cent in 2000 to 144.32 per cent in 2006—almost 40 per cent greater than the eurozone average (OECD 2008: 25, Fig. 1.3).¹⁷ As is widely acknowledged, the disproportionate expansion of the construction sector relative to other sectors during the boom raised the price of non-tradable goods and reduced the competitiveness of exports, fuelling inflation and exacerbating the need to fund social consumption through the further expansion of credit. Meanwhile, overproduction in the construction sector was endemic; between 2001 and 2011, there was a 24 per cent increase in housing stock (to more than 26 million homes), relative to just a 5.8 per cent increase in the population (to approximately 47 million inhabitants) (Stücklin 2013; see also García 2010).

In this context, it is not surprising that the dramatic rise in unemployment since 2008 has not been the only palpable indicator of the impact of the crisis on the working class (unemployment in Spain reached a record high in 2013 of over 6.2 million people, or more than 27 per cent of the population of working age, rising to 57 per cent for under-25s—INE 2014: 5). Indeed, the impact of the crisis on housing provision has been equally stark. Between 2008 and 2012 there were 172,000 court-ordered evictions in Spain as a result of mortgage payment defaults. By 2015 the rate of household evictions stood at 95 per day, in a country with an estimated 3.4 million empty homes (30 per cent of all vacant properties in Europe) (Keeley 2015). The sharp rise in unemployment has swelled the ranks of the surplus labour population in Spain, and to the extent that, by 2013, 12.6 million people were deemed to be at risk of poverty or social exclusion according to government figures (reported by European Commission Staff 2015: 6). The impact of the crisis from the point of view of capital is that internal devaluation (together with labour market reforms in 2010 and 2012) has borne fruit. Unit labour costs in Spain were reduced by 4.1 per cent between 2009 and 2013, while the cost competitiveness gap between Spain and the core, northern eurozone countries narrowed due to wage moderation and some gains in productivity. Yet, the impact of the crisis on labour markets has been to fragment them further still; the share of temporary employment reached 24.6 per cent in 2014 (largely in low-wage, low-skilled positions), with 91.9 per cent of all new contracts in 2014 being fixed term (over half of which were for less than three months) (European Commission Staff 2015: 40). Meanwhile,

Spain has once again become a country of net outward migration, as more and more workers leave to find work abroad.

The impact of the crisis upon the demand for labour-power in Spain in general has not been geographically uniform, however—a fact that reflects the differentiated development of industrial and non-industrial specialisation, and the uneven development of labour markets and the conditions of the reproduction of the working class within Europe and Spain. Of the ten EU regions with the highest unemployment rates in 2012, seven were Spanish (with six Spanish regions among the top ten EU regions in youth unemployment terms); while there were also four Spanish regions in the top ten EU regions in terms of increased unemployment rates, 2008–2012 (the others were in Greece) (European Commission 2013: 34, 36). In terms of the uneven impact of the crisis among Spanish regions, Andalucía, Aragón, Murcia, and Valencia saw their unemployment rate triple between 2007 and 2013 (Cuadrado-Roura and Maroto-Sánchez 2014: 8, 13), while the increase in jobless rates in other regions, such as the Basque Country, La Rioja, and Navarre, was relatively less pronounced—a situation that can largely be explained by longer-term, spatial patterns of regional specialisation in different productive sectors that saw the former regions concentrate production processes in construction and primary commodity sectors. The differences between the regions in terms of risk of social exclusion also reflects the uneven spatial differentiation in the conditions of the reproduction of the working class in Spain; while the rate of risk in the more industrialised, richer regions in the north—such as the Basque Country and Navarre—was less than 20 per cent in 2013, it ranged between 35 per cent and 39 per cent in the Canary Islands, Extremadura, Castilla-La Mancha, and Andalusia—even reaching 47 per cent of the population in the city of Ceuta (Prats 2015).¹⁸

CONCLUSION

This chapter has offered an overview of the development of the Spanish national sphere of accumulation since the Civil War, tracing the material bases for this development within the CIDL as mediated by a—firstly restrictive and then relatively more open—ISI strategy on the part of the Francoist state. We argued that ISI was always beset by an inherently limited potentiality in Spain—the forms of compensation that extended the life of ISI therein being insufficient to sustain it beyond the late 1960s. Not only did the state's commitment to ISI put Spain on the path to a severe crisis by the mid-1970s, therefore, but it also prefigured the

subsequent paths of both political transformation toward liberal democracy and the crisis-ridden integration into the European common market and, later, EMU. The failure of ISI to develop an industrial base of sufficient scale and competitiveness relative to world market industry meant that capital accumulation in Spain would continue to assume a specific, backward European form from the 1980s—even after consolidation of the process of subsumption of the national sphere of accumulation to the NIDL that began with the arrival of the Ford Motor Company in the mid-1970s and which unfolded through the, so-called, multinationalisation of the economy by the late 1990s. Ultimately, the Spanish case serves to illustrate a more general tendency toward differentiated, uneven integration in Europe in which the south is fast being ‘reduced to a zone with a cheaper labour force, outside the safety network of the welfare state, a domain appropriate for outsourcing and tourism’ (Žižek 2013)—a process based upon the fragmentation of the productive subjectivity of the working class and the on-going deepening of the internal differentiation of the conditions of the reproduction of labour-power, within and across various spatial scales within the Europe-wide sphere of accumulation.

NOTES

1. In 2013, the average overall employment rate in the EU stagnated at 64 per cent, with a declining rate among men; the EU-28 unemployment rate had increased to 11 per cent; and between 2008 and 2013 the overall pool of unemployed workers in the EU had grown by 10 million people. The proportion of long-term unemployed in the EU rose to 47 per cent in 2013. Nearly one in five EU workers then held a part-time job, with the proportion of available part-time to full-time work increasing markedly for lowest-skilled manual workers from 2008 (ETUI 2014: 43).
2. Fourteen EU countries have registered a decline in real wages since 2010—the largest reductions being in Greece (more than 23 per cent), Cyprus (–14 per cent), Romania (–13 per cent), Ireland (–6.8 per cent), Portugal (–6.5 per cent), and Spain (–6.1 per cent). Mediterranean and Central and Eastern European have also moved toward a more ‘fragmented and decentralised model of collective bargaining’ since 2009 (Schulten and Müller 2015: 350, 353; see also ETUI 2014: 68).
3. See Charnock et al. (2014: 40–4) for a review of the historical development of capital accumulation in Spain prior to the Civil War.
4. In 1979, Spanish wages in the automotive industry were 20 per cent less than in France, and 52 per cent less than in Germany (Pallarès-Barberà 1998: 350).

5. The number of producers in these markets has fallen from 36 in 1970, to 31 in the 1980s, 22 in the 1990s, and 14 by 2003 (Heneric et al. 2005: 34).
6. It is noteworthy that relations between the INI and the Italian investor Fiat became increasingly fractious from 1971, culminating in the latter withdrawing its stake in SEAT in 1981—the main issue being rapidly increasing labour costs as a result of concessions to the increasingly more militant trade union representing SEAT workers (Tappi 2007: 119–20).
7. Across Europe from the 1980s, there emerged a broader national and regional pattern of the uneven development of automotive production—a pattern into which the Spanish car industry’s relatively backward position was further embedded. A spatial hierarchy in production emerged from the 1980s, with its productive and geographical centre in southern Germany (Bordenave and Lung 1996). There, and typified by Volkswagen, producers have since specialised in the production of larger, high-end, technologically advanced cars using the most complex labour processes, with the highest levels of labour productivity and concentration of R&D development and adoption (Rubenstein 2001: 343).
8. In some models, 80 per cent of components are supplied by sub-contractors (Minetur 2011: 49).
9. Including the differentiated capacities for different workforces to engage effectively in collective bargaining, depending upon the structural position of the capital employing them within the supply chain (see, for example, Las Heras 2015).
10. This remains a defining characteristic of local small capitals in Spain. By 2014, over 90 per cent of firms in Spain employed fewer than nine workers, and more than 50 per cent of workers were employed by firms with a workforces of less than 50 employees (compared with 23 per cent in Germany and 32 per cent in France) (European Commission Staff 2015: 18).
11. See Köhler and Woodward (1997) for a comparative study of the German and Spanish machine-tool industries; and the study of the Spanish steel industry by Montgomery and Sabaté (2010).
12. See Charnock et al. (2014: 77) for a discussion of Spain’s other notable ‘success story’ since the 1990s—its fast fashion clothing production and retail industries, associated with brands such as Mango and Zara.
13. In 2007, construction accounted for 15.4 per cent of industrial output in Spain, compared with 4.7 per cent in Germany, 7.3 per cent in France, and 6.4 per cent in Italy (Cabrero Bravo and Tiana Álvarez 2012: 83).
14. The role of cheap credit in the internationalisation of some Spanish capitals was reflected in the rising level of corporate debt on the Spanish stock market in the mid-2000s; while private sector debt increased by 192.8 per cent between 1996 and 2010 to reach 227.2 per cent of GDP (Eurostat 2012).

- The debt of non-financial corporations nearly doubled relative to GDP during the boom, from 74 per cent of GDP in 2000 to 137 per cent in 2008; by 2011, non-financial private sector debt reached 134 per cent of GDP, a rate second only to Ireland (Roxburgh et al. 2012: 27).
15. For an analysis of the material bases for overproduction in the Spanish real estate market, such as downward pressures on interest rates, land reform, the impact of the dot.com crash, the expansion of tourism and inward migration, and endemic *rentier* practices at the regional and municipal local state scales, see Charnock et al. (2014: Chap. 4).
 16. International Monetary Fund data from 2011, at <http://research.stlouis-fed.org/fred2/series/HDTGPDESA163N> (accessed 14 May 2013).
 17. The ratio of household debt-to-income in Spain remained around 146 per cent at the close of 2014; while the total stock of private debt in Spain stood at 182 per cent of GDP—72.4 per cent of which was household debt, according to European Commission Staff (2015: 25, 29).
 18. There are, of course, longstanding gender dimensions to the fragmentation of Spanish labour markets that have been exacerbated by the most recent crisis (Rodríguez Modroño 2014). For an analysis of the differential impact of the crisis on the disabled, migrants, the young, and the elderly, see Martínez-Molina et al. (2014).

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PART III

Sectoral Case Studies

Transnational Corporations and the ‘Restructuring’ of the Argentine Automotive Industry: Change or Continuity?

Alejandro Fitzsimons and Sebastián Guevara

Toward the end of the 1980s, the Argentine automotive industry had already experienced 15 years of stagnation and contraction following a peak of production in 1973. Nevertheless, a series of studies had begun to circulate that highlighted how its development might be revitalised following global production transformations (Jenkins 1985; Kosacoff et al. 1991; Todesca et al. 1989). In the 1990s, a new expansive phase of local automotive production prompted another series of studies that emphasised the transformations taking place during that decade (for example, Bisang et al. 1995), only for the limitations of such changes to be made

A. Fitzsimons (✉)

Department of Economics and Administration, National University
of Quilmes and National Scientific and Technical Research Council,
Buenos Aires, Argentina

S. Guevara

National Scientific and Technical Research Council, Buenos Aires, Argentina

evident by the long crisis experienced by the Argentine process of capital accumulation between 1998 and 2002. But the strong expansion of the last decade has once again revived discussion about the ‘restructuring’ of the Argentine automotive industry (Barbero and Motta 2007; López 2007; Pinazo 2013; Santarcángelo and Perrone 2012). Beyond the differences due to theoretical approach and date of publication, it is clear that research on the automotive industry over the last 25 years shares a common point of view. In effect, most studies propose that restructuring has qualitatively changed the dynamics of the sector with respect to the preceding era. More precisely, the development of the local automotive industry is considered to have passed through two great ‘models of development’. The first model, whose beginnings are located in the late 1950s and which ended at some point between the mid-1970s and late 1980s, is usually characterised by the orientation of production toward the domestic market, low levels of global productive integration, and limited international competitiveness. Owing to inward-oriented and relatively isolated production, this first stage of industrialisation is not seen as having been especially determined by the development of the international division of labour in this sector, but rather as part of the broader process of import substitution experienced by post-war Latin American economies. It is then usually argued that from the early 1990s the incorporation of the country into the new international division of labour (NIDL), through the reorientation of production toward external markets, put in place a second model of development. This new productive model permitted the overcoming—at least partially—of the shackles on growth deriving from the ‘inward-looking’ nature of the prior model.

A first aim of this chapter is to question this dominant account of the development of the Argentine automotive industry. In short, our argument seeks to highlight that the development of the NIDL in the global automotive industry did not result in a qualitative restructuring in the local automotive industry but, conversely, recreated it on the same bases as during the preceding period of the 1960s and 1970s. More precisely, we argue that even after the, so-called, restructuring of the sector, the valorisation of local subsidiaries of transnational corporations (TNCs) was based on the appropriation of a portion of ground-rent flowing into the Argentine space of capital accumulation as a result of its role in the classical international division of labour (CIDL) as an exporter of raw materials (see Chap. 3). In fact, we also argue that the development of the NIDL at global level did not appear ‘from out of the blue’ so as to qualitatively

transform the Argentine automotive sector from a backward and isolated industry into a modern link in the international division of labour. Instead, we will see that technological change at global level, and changing forms in the international division of labour that derived from it, were fundamental determining factors from the very origin of the local automotive industry, and not only of its alleged modernisation through restructuring during the last quarter of a century. In this sense, a second aim of this chapter is to offer an analysis of the Argentine automotive industry based on the general approach developed in this book, which emphasises the persistence of the CIDL in the present day and its complementarity with the NIDL.

To tackle these objectives, we first concentrate on an analysis of the main arguments put forward by those who support the account of the qualitative restructuring of the local automotive industry, outlined above. Subsequently, we address a question that is almost universally avoided in specific studies of the sector, namely, the analysis of the concrete conditions of the valorisation of 'foreign', or TNC, capital in Argentina and, above all, its sources of profit. Finally, the last part of this chapter returns to the question of the historical long-term evolution of the Argentine automotive industry as part of the global automotive industry.

THE, SO-CALLED, RESTRUCTURING OF THE ARGENTINE AUTOMOTIVE INDUSTRY

There is little doubt that the first stage in the development of the Argentine automotive industry—roughly from the mid-1950s to at least the mid-1970s—was characterised by its small scale, the use of backward technology by international standards, and the relatively low productivity of labour. In effect, the size of the domestic market proved insufficient for production under normal technological conditions prevailing in the most industrialised countries. For example, while production in Argentina reached a peak of almost 300,000 vehicles in 1973, annual output in the main European countries was between two to four million vehicles, that of Japan was more than five million, and that of the USA was some ten million vehicles. Due to the fragmentation of the domestic industry, in terms of both manufacturers and models produced, the technical difference in scale was even greater than that suggested by an international comparison of production levels. Even at its peak only a few models reached production

levels of 15,000 annual units (Asociación de Fábricas de Automotores 1996). By contrast, according to various estimates from the period (see Husan 1997), the ‘theoretical’ minimum efficient scale of production was at least 200,000 units, while real production runs of the most produced models in the USA and Europe were greater still. In addition to the small scale of production, there also exists a consensus concerning the use of productive processes that were far from the cutting edge of technology at that moment (Baranson 1969: 46–8; Nofal 1989: 89–94; Sourrouille 1980: 121). In effect, Argentine factories were designed for productive processes with a high participation of manual labour. For example, in the machine shops production lines were initially planned with single stations, and manually controlled machines that allowed for the machining of many different parts. This meant that in each station the worker had to manually load, position, operate, and unload the machine and, in some cases, change the cutting tools for each sequence of the process (Nofal 1989: 90). Also, the transfer of the object from one station to another was done manually (Harari 2011: 143–4). In the press shop, moreover, the high rotation of dies imposed by the low volume of production (Baranson 1969: 47) made it impossible to automate the unloading of the presses, technology that was already in use in the USA by the 1950s (White 1971: 21). And, in final assembly the differences in scale mainly affected the speed of the assembly line, which was much slower in Argentina than in the USA. This resulted in a lower degree of worker specialisation and therefore of the machinery used; consequently, manual instruments were used instead of the automatic machines used in the USA (Baranson 1969: 47). In summary, while the global automotive industry was advancing toward the automation and deepening of large-scale industry through *machinofacturing*, factories in Argentina were predominantly organised around a manufacturing system based on the manual division of labour and not on a system of machinery.

Likewise, it is clear that the small scale of production had important negative consequences for the productivity of labour and the costs of local industry. In effect, productivity throughout the 1960s was between two and three times lower than in Europe, and more than five times lower than in the USA (Asociación de Fábricas de Automotores 1969). The low productivity of the sector, and subsequently of the auto-parts industry, appeared to have strong repercussions for costs of production which, it has been estimated, were twice those of the USA in 1967 (Baranson 1969: 34).

For these reasons, the majority of researchers have been very critical of this first stage in the development of the Argentine automotive industry. Their criticism has been directed toward state policies, which are deemed to have been misconceived or poorly implemented (Remes Lenicov 1973); or, alternatively, toward TNCs for their oligopolistic, speculative, and/or absenteeist strategies (respectively Sourrouille 1980; Schvarzer 1993; Nofal 1989). These motives, it is argued, prevented the domestic automotive industry from reaching normal international standards of productivity and quality. This argument presupposes the idea—sometimes explicitly—that the Argentine automotive industry could (and should) have superseded a first, 'protected', stage in order to reach a second, 'competitive', stage. The failure of this transition would, for such researchers, ultimately explain the 15 years of stagnation and contraction in the industry from the mid-1970s as being due to a fall in domestic demand and the trade policy implemented by the state.

Nevertheless, and albeit after a prolonged delay, the Argentine automotive industry resumed its growth from the early 1990s, surpassing the 1973 level of production by 1994. The number of firms operating in the country, which had fallen during the 1980s, rose again with the re-entry of various TNCs that had withdrawn in the heat of the crisis, and with new entrants. As mentioned in the introduction, the argument that emphasised profound changes in the dynamics of the industry gained credence among scholars thereafter. Furthermore, the strong recovery of the industry after the crisis of 2001, which raised domestic production to levels that far exceeded pre-crisis levels, only appeared to vindicate the restructuring thesis. In effect, various recent studies argue that the Argentine automotive industry has left behind its inward-oriented character, so as to integrate itself in global value chains. From this perspective, this was possible because of the growth in the scale of production, the modernisation of factories, the multiplication of labour productivity, and the fall in real wages, which jointly contributed to increasing competitiveness by means of reducing costs. As a further consequence, it is underlined that foreign trade by the sector has noticeably increased (Barbero and Motta 2007; López 2007; Pinazo 2013; Santarcangelo and Perrone 2012).

The principal problem of these studies is that they tend to restrict their analysis to the domestic sphere, leaving international comparisons in the background. That is, they affirm the positive changes in national indicators with respect to their previous performance but without sufficiently taking into account that the industry was also 'restructured' at a global level.

Even if they do explain the domestic transformation by departing from global transformations, they overlook that the latter were much more profound than the former, such that all improvements within national parameters are dwarfed when compared internationally. As we show, this demonstrates once more the permanence and, indeed, the deepening of the long-standing gap between national and global production conditions.

To begin with, although it is true that the absolute growth in production was significant, especially in recent years, the domestic scale of production continued to lag considerably behind that of the rest of the world. Even in 2011, a record year for domestic production, output in Argentina only reached one per cent of world production (a level only marginally superior to the 0.76 per cent achieved in 1973). On the other hand, although the relative gap in scale was reduced with respect to the 'classic' producing countries in the automotive industry, the difference in 2011 remained significant: in that year Argentine production was 9.5 per cent of that in the USA; 13 per cent of that in Germany; and 9.9 per cent of that in Japan (the absolute gap in scale, of course, greatly increased). Further, in relation to emerging economies the evolution was markedly negative. While in 1973 between two and three times more vehicles were produced in Argentina than in South Korea and India, in 2011 production in both of those countries was five times that of Argentina. Even with respect to Brazil the relative size of domestic production decreased, going from 39 per cent to 24 per cent between 1973 and 2011. And further still, if we include China, the difference in scale between Argentina and the currently largest global producer remains at the same level as in the 1970s, that is, around a difference of twenty times in the level of production.¹

The persistence of high levels of fragmentation in the domestic industry, in contrast with a strong global tendency toward the centralisation of capital, tended to counteract any improvement that could have resulted from the increase in absolute scale at the national level. While during the contraction of the 1980s the number of firms in the automobile manufacturing sector had been reduced to three, the subsequent expansive phase was accompanied by an increase in the number of automotive firms, such that there are currently eight firms in the same sector. As a consequence, differences in scale by firm and by plant were greater than the aforementioned gap in national scales. Additionally, in spite of the specialisation derived from regional integration, the proliferation of models also maintained a characteristic limit to economies of scale in Argentina (see Tables 8.1 and 8.2).

Table 8.1 Largest automotive producer by country, 2013

<i>Country</i>	<i>Firm</i>	<i>Units produced (thousands)</i>
Japan	Toyota	4290
China	General Motors	3186
USA	Ford	2326
Korea	Hyundai	3125
Germany	Volkswagen	2471
France	PSA Peugeot Citroën	939
Argentina	PSA Peugeot Citroën	143 ^a

Source: Asociación de Fábricas de Automotores; Organisation Internationale des Constructeurs d'Automobiles, 'Production Statistics' (at <http://www.oica.net/>)

^a2011

Table 8.2 Automotive production by plant, selected cases (2013)

<i>Plant</i>	<i>Units (thousands)</i>	<i>Models</i>	<i>Production by model</i>
Hyundai in Ulsan, Korea	1513	13	116
Honda in Marysville, USA	734	4	184
Toyota in Georgetown, USA	504	3	168
Volkswagen in Wolfsburg, Germany	807	3	269
PSA in El Palomar, Argentina	143	7	20

Sources: Japan Automobile Manufacturers Association (2014), Asociación de Fábricas de Automotores; Volkswagen (2014); Hyundai Motor Company (<http://worldwide.hyundai.com/>)

As a consequence of the persistence of problems of scale, the modernisation of domestic plants was also limited in extent. During the 1990s, when the importation of machinery was made much cheaper by the strong overvaluation of the national currency (see Chap. 3) and facilitated by trade liberalisation, modernisation consisted fundamentally in the relative flexibilisation of the pre-existing electro-mechanic technical base, and not in its replacement with microelectronics. For example, a study of the changes implemented in the Ford factory shows that, instead of renewing machinery, old presses in the stamping section (in production since the 1980s) were adapted through the attachment of numerical control units. In a similar way, the introduction of robots was limited to specific tasks in certain sections (especially in welding), co-existing with traditional manual labour in other operations (Lascano et al. 1999). In fact, the largest innovations were applied to new forms of work organisation (especially team-work)

rather than to technical change; and even in this case the application was partial and by ‘hybridising’ methods used in parent companies with those being applied locally (Motta et al. 2007: 256). Therefore, by applying certain microelectronic components into old electromechanical machinery, and partially reorganising labour relations, capital could increase labour productivity without needing to comprehensively renew the equipment being used. As a result, the level of automation in Argentina, although higher than in previous decades, remained substantially lower than in Japan or the USA (Motta et al. 2007: 264). And the same could be said about the implementation of robotisation (López 2007: 43).

With regard to labour productivity, international comparison also brings into question the restructuring thesis based upon an analysis restricted to the national sphere. For instance, even at the peak of production in the years 2011–2013, output per worker was still two and a half times lower than in the most industrialised countries, and the productivity gap in absolute terms was more than twice that of the 1960s (see Table 8.3).² Moreover, if we consider the labour productivity of the best performing factories in different countries instead of national averages, the productivity gap increases notably (see Table 8.4).

Table 8.3 Vehicles per worker, selected countries

Japan (2013)	60
Spain (2013)	37
United Kingdom (2013)	61
USA (2013)	61
Argentina (2011)	26

Sources: Asociación Española de Fábricas de Automóviles y Camiones (2013); Japan Automobile Manufacturers Association (2013); Society of Motor Manufacturers and Traders (2014); Asociación de Fábricas de Automotores; Organisation Internationale des Constructeurs d’Automobiles, ‘Production Statistics’ (at <http://www.oica.net/>); Bureau of Labor Statistics (Current Employment Statistics)

Table 8.4 Vehicles per worker, selected plants

Nissan in Sunderland, UK (2002)	98
Renault in Valladolid, Spain (2002)	89
Honda in Greensburg, USA (2013)	105
Toyota in Blue Springs, USA (2013)	101
Renault in Santa Isabel, Argentina (2013)	36

Sources: World Markets Research Center (<http://www.wmrc.com>); Japan Automobile Manufacturers Association (2014); Asociación de Fábricas de Automotores

A final argument put forward by defenders of the restructuring thesis rests on the increase in foreign trade. From this perspective, this rise demonstrates the definitive abandonment of the inward-looking model. Effectively, Argentina came to export, on average, 50 per cent of production between 1995 and 2013, with peaks of more than 60 per cent. This situation makes the development of the Argentine automotive industry resemble that of other 'emerging' countries that were fully incorporated within the NIDL, such as Spain, South Korea, or Mexico. However, to fixate on this indicator can be misleading. To begin with, exports as a proportion of total production in these latter countries is significantly higher, oscillating between 70 per cent and 80 per cent. Of more importance are the differences between the markets to which these other countries export and the destination market for almost all Argentine exports, that is the Mercosur (the common market of the Southern Cone).³ The latter is much smaller in comparison to other regional and even national markets, being half that of the Japanese domestic market, almost a quarter of the European, and more than five times smaller than the US market. Furthermore, it is highly protected, as is shown by the continued dependency of Argentine industry on the Mercosur's limitations on foreign competition.⁴ But, above all, the principal restriction on the Argentine external market is due to the limited character of regional integration. In effect, far from being a complete integration of national markets within a larger regional market, the regime of automobile foreign trade between Argentina and Brazil was structured around rules of compensated exchange. As a consequence, access to the protected Brazilian market is conditional upon the proportional opening of the domestic market to imports from Brazil. Therefore exports, and as a consequence domestic production, remain limited by the size of the internal market, however much regional integration has permitted an increase in the specialisation of each country in terms of models produced.

In summary, international comparison allows us to conclude that the majority of characteristics usually deemed specific to the Argentine automotive industry in the 1960s and 1970s are, in fact, reproduced today, namely: production restricted by the size of the domestic market; a substantially smaller scale of production than in the principal producing countries; technology that is way behind the frontier of technical innovation; and, finally, relatively low labour productivity. Yet, alongside these limitations, another important characteristic is also reproduced, that is, the operation in the country of the principal automotive TNCs. And, furthermore, it is the case that the TNCs in Argentina have consistently

obtained rates of profit equal to, or even higher than, those existing in the sector at global level, at least during the expansive stages of the industry (Sourrouille 1980; Fitzsimons 2014; Pinazo 2013). This begs a question that has not received the attention it deserves, despite it being crucial for an understanding of the development of the automotive industry at the domestic level, namely, how do TNCs manage to obtain normal (and sometimes extraordinary) rates of profit with small scales, backward technology, and generally obsolete systems of production?

SPECIFIC SOURCES OF PROFIT FOR AUTOMOTIVE TNCs IN ARGENTINA

In order to reemphasise its importance, let us reformulate the problem. The normal source of profit for any industrial capital is the surplus labour of the workers it employs. However, the achievement of a normal rate of profit is conditional upon those workers producing under the normal technical conditions for the sector. Otherwise, the lower relative productivity of labour would result in a smaller quantity of physical production per unit of labour-time and, therefore, in greater 'individual values' of the commodities produced (Marx 1976: Chap. 12); or, more precisely, in greater individual prices of production relative to those that correspond to average social conditions. But, given that the social determination of value (price of production) depends precisely upon these average or normal conditions, the greater values or individual prices of production are not recognised in the market. In other words, backward capitals waste (surplus) labour-time by producing under suboptimal technical conditions, which results in their immediate incapacity to valorise normally due to their higher costs of production. Consequently, those capitals that operate in technical conditions inferior to normal capitals can only obtain normal profits if they regularly access other compensatory sources of profit, sources that are distinct from the appropriation of normal surplus-labour carried out by their own workers. In this sense, we argue that automotive TNCs in Argentina compensate for the relatively low productivity with which they operate, and for its corresponding effect on costs, on the basis of the existence and possibility of appropriation of extraordinary sources of profit.⁵ What, therefore, were the extraordinary sources of profit in the Argentine automotive industry?

It is immediately obvious that greater costs of production can be compensated for either by selling at prices superior to those of socially

existing prices of production, or by the payment of below normal wages.⁶ Indeed, the two main existing responses in the literature to the problem we have posed (even if this problem is not clearly formulated in those studies) revolve around these two situations. On the one hand, the most widespread position has focused on the oligopolistic and/or speculative behaviour of TNCs, which would have allowed them—together with state policies—to focus their valorisation strategy on the imposition of abnormally high prices, instead of technical innovation, thereby perpetuating the inefficiency of the sector (Jenkins 1984; Nofal 1989; Schwarzer 1993; Sourrouille 1980). On the other hand, more radical approaches—and in particular those related to dependency theory—have placed greater emphasis on low domestic wages in relation to those in the more industrialised countries, which they immediately interpreted as a form of the 'super-exploitation' of the domestic working class (Cimillo et al. 1973; Marini 2007). We think, however, that both analyses have focused only on the superficial manifestations of the valorisation of TNCs, and have failed to identify the precise sources of social wealth which the latter appropriate via high prices and low wages.

Let us begin with the question of prices. The vast majority of scholars tend to agree that during the, so-called, inward-looking stage internal prices were set above international prices as a result of the prohibition on imports of finished vehicles (Jenkins 1984: 46; Sourrouille 1980: 81). Although barriers to imports were lifted after 1975, other restrictions replaced them, such as quota systems, compensated exchange, and tariffs. The difference between international and domestic prices was therefore maintained, allowing for the continuity of local sales of both domestically produced and imported vehicles at high prices, as has been repeatedly shown in the specialised literature (CENDA 2008; Guevara 2010; Llach et al. 1997; López 2007). But it is often overlooked that this means that, throughout the history of the Argentine automotive industry, there has been sufficient solvent demand to validate domestic prices that were consistently set above global prices of production. As a result, one must explain the sources of this exceptional purchasing power on the part of Argentine consumers relative to those of other countries.

A first explanation may be found in the market destination of automotive production. It is the case that in Argentina there is demand for vehicles for use as means of production and/or for the transport of agricultural commodities. The greater costs that agrarian capital must incur in paying for its automotive means of production above its price of production can be trans-

ferred upwards toward the rent of the landowning class. Consequently, the social wealth that flows to TNCs via the sale of their product at commercial prices superior to those of production is, in the corresponding proportion, a part of the agrarian ground-rent whose appropriation determines the specificity of capital accumulation in Argentina (see Chap. 3). In this sense, it is worth noting that, in the period 1960–1975, the Argentine automotive industry was especially oriented to the production of commercial vehicles (see Table 8.5). Although the proportion of commercial vehicles to total output later fell, the specialisation in the production of commercial vehicles grew considerably in the period of expansion after the crisis of 2001 (see Table 8.6). On the other hand, although it is difficult to estimate its importance quantitatively, another portion of production was certainly destined for the personal consumption of landowners. As is evident, the source of this purchasing power is also ground-rent. The existence of a sumptuary component in the consumption of vehicles in Argentina is obviously consistent with the relative importance of large cars in domestic automobile production in comparison with Europe and, further still, with Japan, especially in the 1960s and 1970s, when mainly small and medium vehicles were consumed in those countries (Table 8.7). In summary, both characteristics of the ‘product mix’ of the Argentine automotive industry appear to indicate that an important portion of the vehicles produced is linked to the cycle of agrarian capital, or with landowners’ consumption, and that therefore overpricing acts as a vehicle for the appropriation of ground-rent on the part of TNCs.

Agrarian ground-rent also generated growing demand for automotive vehicles in general (and not only for those directly consumed by agrarian

Table 8.5 Commercial vehicles as percentage of all vehicles (1960–1975)

<i>Country</i>	
Argentina (1960–1975 average)	29.7
USA (1961–1975 average)	17.3
UK (1970)	21.8
Germany (1970)	18.5
France (1970)	10.6
Italy (1970)	7.3
World (1970)	23.5

Sources: Organisation Internationale des Constructeurs d’Automobiles, ‘Production Statistics’ (at <http://www.oica.net/>); and Asociación de Fábricas de Automotores

Table 8.6 Commercial vehicles as percentage of all vehicles (2003–2013 average)

<i>Country</i>	
USA	62
Mexico	40
Argentina	35
China	29
World	24
Spain	20
Japan	14
Korea	9
Germany	5

Sources: Organisation Internationale des Constructeurs d'Automobiles, 'Production Statistics' (at <http://www.oica.net/>); and Asociación de Fábricas de Automotores

Table 8.7 Percentage of vehicles by engine size, selected countries (1964–1965)

	<i>Argentina</i>	<i>Italy</i>	<i>France</i>	<i>Germany</i>	<i>UK</i>	<i>Japan</i>
Below 1000 cc.	37	68	51	9	18	86
1000–2000 cc.	25	31	43	87	69	14
Over 2000 cc.	38	1	6	4	13	0

Sources: Pratten and Silberston (1967: 377); Asociación de Fábricas de Automotores

capital and landowners). It did so because one of the normal courses followed by agrarian ground-rent in Argentina has been its primary appropriation by the national state and its subsequent conversion into public spending.⁷ In this way, agrarian rent augmented the demand for industrial commodities in general, including that of the automotive industry. Consequently, the overpricing of vehicles destined for general domestic consumption was also sustained, at least partially, by agrarian ground-rent.

In summary, the existence of ground-rent was, directly or with the mediation of state policies, a source of growing demand for automotive vehicles. This explains the setting of domestic sale prices above international prices of production. Without this extraordinary source of social wealth that validated those relatively high prices, the fixing of protectionist measures—at national or regional levels—would simply have contracted the consumption of vehicles, instead of expanding it, as happened in Argentina, in every one of the growth phases of the industry.

As we saw, the second main response offered to the question of the sources of valorisation of automotive capital in Argentina is linked to the payment of low wages, in international terms. Usually, any 'advantage' derived from the hiring of cheap labour-power is interpreted simply as a reduction in costs (Barbero and Motta 2007; Jenkins 1985; Santarcángelo and Perrone 2012), without identifying the reasons for existing wage levels nor the source of the advantage in question. Dependency theory, for its part, simply asserts that this amounts to the 'over-exploitation' of labour-power; that is, the source of profit in the 'periphery' lies in the greater degree of extraction of the surplus labour from workers than in 'core' countries (Cimillo et al. 1973: 55–6, 95–7; Marini 2007: 124–31). We think, however, that the question of the conditions of the hiring and exploitation of labour-power deserves a deeper analysis.

To uncover the source of the advantage obtained by TNCs through cheapened purchase of labour power, it is crucial to transcend the simple comparison of wages by means of existing official exchange rates, as is usually the case in the aforementioned studies. In Argentina the official valuation of the currency (through diverse instruments of economic policy) has been a recurring form of the appropriation of social wealth. This distorts any effective comparison based on this variable. It is clearly necessary, therefore, to correct deviations in the official exchange rate with respect to the parity corresponding to the real capacity of the national currency to represent value. This allows us to capture more adequately the magnitude of value represented in the monetary wage received by Argentine automotive workers in relation to other countries. Taking the method of relative purchasing power parity over a base period (Inígo Carrera 2007: 31–3),⁸ it can be concluded that, in terms of value, the Argentine automotive wage has historically been between three and four times lower than its US counterpart (see Fig. 8.1). This means that, in order to put an automotive worker into production, TNCs must disburse as much as three to four times less variable capital than if they had to hire labour-power in the socially normal conditions of exploitation of labour-power prevailing at the global level.⁹

Nevertheless, this cheapening of labour-power does not necessarily imply a greater exploitation of labour-power. Leaving aside questions relating to the extension of the working day and the intensity of work,¹⁰ the comparison of real wages shows that the Argentine automotive worker was capable of consuming between one half to three quarters of the levels of consumption reached by a US worker (see Fig. 8.1).¹¹ This means

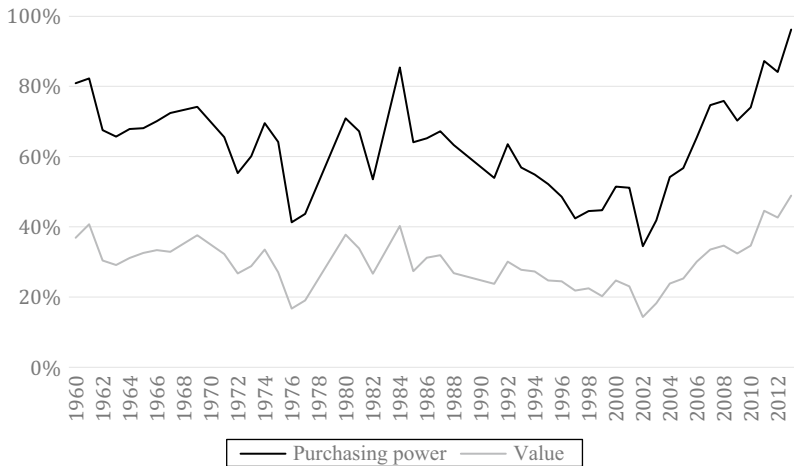


Fig. 8.1 The automotive wage in Argentina as percentage of the US wage.
Sources: see Appendix

that the Argentine worker's ability to consume was much closer to that of the American's than is indicated by the value of her or his wage; or, put another way, that the Argentine worker could purchase more use values per unit of value than their American counterpart. The explanation for this situation resides in the domestic prices of wage goods for the working class. In effect, within the Argentine space of capital accumulation agrarian commodities circulate more cheaply than in the world market. Given that the domestic sale of these commodities below their normal price of production is only possible because of the existence of agrarian ground-rent, the cheapening of labour-power constitutes a vehicle for the appropriation of this rent by industrial capital and, in our case, by automotive capital. In brief, the process of appropriation of ground-rent by industrial capital explains, to a large extent, the relative cheapness of labour-power in Argentina. Quantitatively, this determination explains half of the difference between the Argentine and American automotive wage in the period 1960–2013. We see in the next section that, especially in periods of a relative contraction of ground-rent, this relative cheapening of labour-power has been complemented by a direct fall in real wages. In other words, what is at stake is not only the cheapening of the means of subsistence but also a fall in consumption on the part of the working class.

In conclusion, the preceding analysis shows that the fundamental basis for the valorisation of TNCs in Argentina has been the appropriation of a portion of the agrarian ground-rent circulating in the country, both through the purchase of cheapened labour-power and through selling at prices that have been set above those of production.¹² In this way, automotive TNCs have compensated for the backward technical conditions in which they operated. However, to do so they have had to complete their cycle of valorisation within the national (or regional) market. This is for two reasons: first, because the maintenance of those higher sale prices required tariff protection; and second, because the extraordinary profit gained from the cheapening of labour-power would have been more than offset had they oriented production toward exports. In effect, we have seen that a tendency to overvalue the currency has been a defining trait of the Argentine process of capital accumulation, precisely because of its role as one of the most powerful mechanisms for the appropriation of ground-rent.

However, while this specific form of the valorisation of capital explains to a large extent the main characteristics of the development of the automotive industry in Argentina (that is, the presence of the main TNCs, the orientation toward the domestic market, backward technology, and so on), we must also explain its historical evolution. In particular, the diverse phases through which the industry has passed at the domestic level, and the transformations involved, even though the most fundamental form of valorisation has remained essentially unchanged.

CHANGE AND CONTINUITY IN THE ARGENTINE AUTOMOBILE INDUSTRY

A first challenge is to explain the precise moment of the establishment of TNCs in the country, which took place toward the end of the 1950s. The mere possibility of appropriating agrarian ground-rent is obviously not sufficient, since this possibility was present in its general form long before then. From our point of view, to be able to answer this question it is crucial to focus on the global development of the post-war automotive industry, so as to identify the determinations of the international expansion of TNCs in those years.

It is worth pointing out that the automotive branch of production was one of the pioneers, toward the mid-twentieth century, of the development of the automation of the productive process of capitalist large-scale

industry. Before then, its system of production was based on a combination of the manufacturing division of labour and the mechanised assembly line (Grinberg 2011: 133–4; Coriat 1982: 27–43). The introduction of transfer machinery and, above all, its mechanical connection in an automated production line (a system known as fixed automation), triggered a spatial reorganisation of the global automotive industry. In enabling the incorporation of less-skilled labour-power as an appendage to the system of machinery, technical changes boosted the automotive industrialisation of East Asia; first in Japan, later in Korea, and later still in other countries of the region. In fact, the link between the development of automation and the emergence of East Asia as a region of industrial production for the world market has been at the core of the classic NIDL thesis. But the link between this technical revolution and Latin American industrialisation—including, of course, Argentina—has been frequently overlooked in the literature. We think that this point is key to understanding the process in the latter.

To begin with, the technical revolution took the concrete form, as always happens in the capitalist mode of production, of the intensification of competition between individual capitals for the appropriation of surplus profits related precisely to the innovation process (Marx 1976: 433–6; 1981: 279, 300–1). In turn, this competition imposed the need to discard increasingly obsolete machinery by virtue of what Marx called 'moral depreciation' (Marx 1976: 528; 1992: 250, 264), even if this machinery remained useful in the technical sense. This general determination was intensified in the case of US firms, which were widely dominant in the world market up to that point, due to the fact that automation had made possible the accelerated development of capital accumulation by European and, especially, Japanese firms (Pratten and Silberston 1967: 81). In effect, the relative cheapness of the labour-power in these latter regions made them more adequate for the incorporation of the new technical base, which required less-skilled labour-power. US firms, in contrast, were facing a double obstacle to technical change. On the one hand, labour-power was relatively expensive, owing to its higher qualifications (Grinberg 2011: 136–8); on the other hand, they were stuck with a large magnitude of fixed capital, corresponding to the antiquated technical manufacturing base, whose material form was increasingly obsolete (Wilkins and Hill 2011: 408). In summary, this was a period in which the automotive TNCs, especially US firms, faced a strong need to discard machinery so as to accelerate technical change in their home countries.

It was, in fact, this antiquated capital, obsolete for the new normal technical conditions, which was relocated to Argentina.¹³ US firms principally [which were responsible for 60 per cent of foreign direct investment (FDI) in Argentina], but also European firms, found in Argentina a highly profitable alternative to the scrapping of obsolete machinery. In fact, the initial FDI in the Argentine automotive industry was directly made to a large extent in the form of machinery, equipment, and dies, with little or no investment in the form of money-capital (Sourrouille 1980). Also, there exists abundant evidence, as much qualitative as quantitative, attesting to the second-hand character of a good part of this machinery.¹⁴ It is therefore especially significant that the sectors with the greater proportion of antiquated equipment were the machining, painting, and stamping sections (Asociación de Fábricas de Automotores 1969)—the very phases of the labour process in which automation had made more progress at the global level.

This antiquated machinery, already obsolete for the level of technical development prevailing at the global level, could be put into production in Argentina as a result of the specific form of valorisation centred on the appropriation of ground-rent. On this basis, the automotive TNCs increased their production in the country between 1960 and 1974. However, this ‘strategy’ had a very definite limit. In effect, the reproduction of this form of valorisation depended upon a sufficient quantity of ground-rent as a source of compensation for the lower productivity of labour. In other words, the reproduction of capital accumulation in the automotive industry was dependent upon the TNCs being able to access agrarian rent so as to obtain the normal rate of profit. But it so happened that the quantitative necessity for ground-rent as a source of compensation was growing, since technical change continued at global level. From the mid-1970s in particular, the development of microelectronics tended to widen the productivity gap between normal conditions of production at global level and those prevailing in the Argentine process of accumulation.¹⁵ For its part, after the strongly cyclical movements of the 1970s, ground-rent stagnated in the 1980s at levels similar to the 1960s (see Fig. 8.2). Following a similar movement to the process of capital accumulation as a whole in Argentina, the combination of a growing necessity for sources of compensation and the stagnation of ground-rent brought the local automotive industry to a period of crisis and contraction between the end of the 1970s and the beginning of the 1990s.

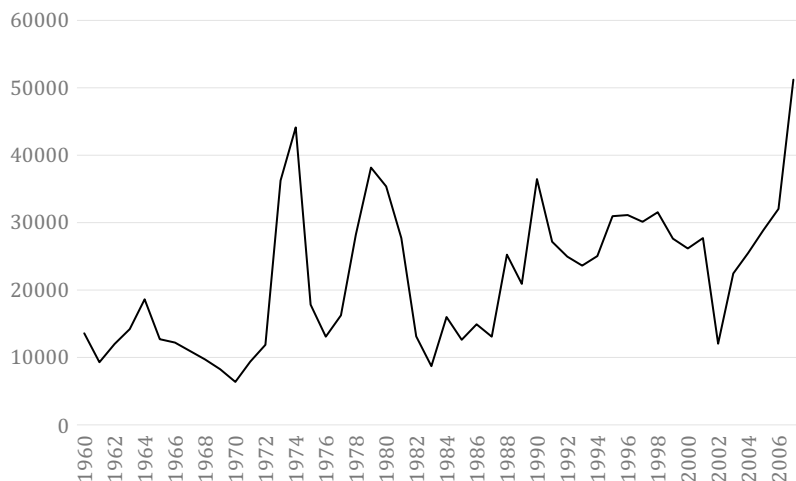


Fig. 8.2 Total agrarian ground rent (millions of 2004 ARS). *Source:* selected data from Iñigo Carrera (2008)

Various determinations combine to explain the recovery of the Argentine automotive industry during the last 25 years. First, the availability of agrarian ground-rent recovered from the contraction of the 1980s and stabilised in the 1990s at levels superior to those reached previously (with the exception of the relatively isolated peaks of 1974 and 1979; see Fig. 8.2). This increased source of extraordinary profit was appropriated by TNCs through the already analysed mechanisms linked to high domestic prices and the cheapened purchase of labour-power, to which could be added, in the latter decade, the remission of profits abroad with a sustained overvaluation of the currency.

However, and second, the conditions of purchase and exploitation of labour-power had worsened sharply as an expression of the general crisis in the national sphere of capital accumulation from the mid-1970s. In effect, the consumptive capacity of the automotive wage fell strongly from 1995, reaching levels in 2003 that were comparable with the most repressive years of the last military dictatorship (1976–1978).¹⁶ In a comparative perspective with the USA, the wage fall in Argentina was of a greater size; in 1996–2003, the consumptive capacity of the Argentine automotive worker was 45 per cent that of the US worker, in contrast to almost

70 per cent in 1984–1988 (see Figs. 8.1 and 8.3, and Appendix). This divergence in the conditions of reproduction of the working class does not seem to derive from differences in productive attributes demanded from automotive workers in each country. If anything, the lower degree of automation of production in Argentina compared with the USA, and therefore the lower degradation of the productive attributes of the worker in the former country, would indicate an inverse relation to that which actually developed. Therefore, this absolute and relative fall in the Argentine real wage shows that the wage was, at least in this period, clearly lower than the value of labour-power. In this way, a second explanation for the recovery of the automotive industry is based on the emergence of a new source of extraordinary profit, namely, the appropriation of a portion of the value of labour-power. This fall in the level of the consumption of the working class adds to the cheapening of agrarian commodities seen earlier, increasing further still the wage difference (in terms of value) between Argentina and the USA.

Certainly, the pronounced recovery of the automotive real wage from 2004 tended to erode this new source of profit for automotive capital. But, simultaneously, the agrarian ground-rent grew abruptly, reaching levels much higher than those of the 1990s.¹⁷ In this way, ground-rent

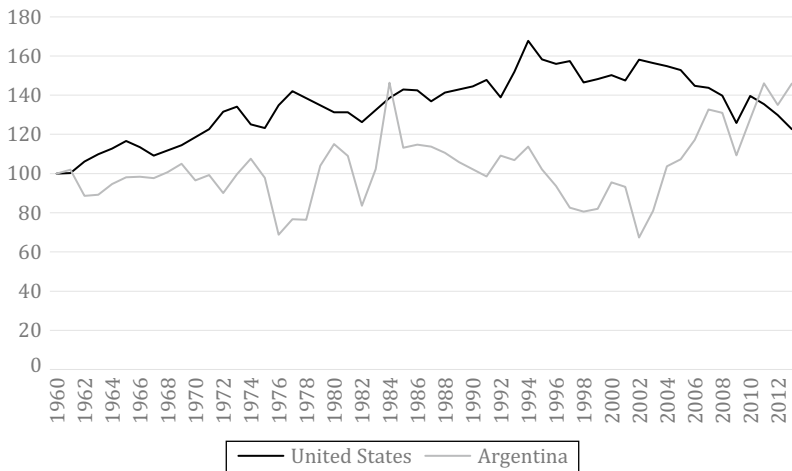


Fig. 8.3 The real automotive wage in Argentina and US (1960 = 100). *Sources:* see Appendix

resumed its leading role as a source of extraordinary profit for automotive capital, displacing the centrality of the sale of labour-power below its value. In effect, at least according to the data offered by the automotive firms, the recovery of the real wage in the years of the greatest boom in the sector (2011–2013), brought the consumptive capacity of Argentine workers to levels close to those of US workers. Despite this virtual equalisation in consumption levels, the relation between Argentine and American wages was 45 per cent in terms of value, demonstrating the full validity of the appropriation of ground-rent via the cheapening of the consumption bundle of labour-power in Argentina. Another element that demonstrates the renewed importance of ground-rent in the valorisation of automotive capital is the resurgence of specialisation in the production of commercial vehicles destined for use in the production and circulation of agrarian commodities (see Table 8.6).

The above perspective on the evolution of the forms of valorisation of automotive capital in Argentina allows us to put forward a novel point of view on the content of the, so-called, restructuring of the local automotive industry. In effect, far from implying qualitative changes in the functioning of the sector, the changes that took place over the last 25 years can be seen as the concrete form through which capital has been able to reproduce its form of valorisation by means of the appropriation of agrarian ground-rent. The increases in the scale of production, the relative modernisation of the factories, regional integration, and so on, allowed for the partial counteracting of the increase in the technical gap and of the scale that had emerged out of the deepening of the automation of large-scale industry by means of the development of electronics. In turn, this permitted capital to take advantage of the increase in extraordinary sources of profit available in the Argentine space of accumulation. However, this 'restructuring' did nothing more than reproduce, at the same time, the specific limit of this form of capital valorisation, that is, its dependence upon the magnitude of those same extraordinary sources of profit and, most especially, of the magnitude of ground-rent.

CONCLUSION

In this chapter we offered a general vision of the development of the automotive industry in Argentina. Our principal argument was that global technical change, and the corresponding forms of the international division of labour, determined the modes of valorisation of the automotive

TNCs from the origins of the local industry up until the end of the 1950s, and not only from the, so-called, restructuring of the 1990s. Concretely, we claimed that the participation of the Argentine space of accumulation in the CIDL as a producer of agrarian commodities was complemented by the global dispersion of industrial production most associated with the NIDL. This combination of both forms of participation of the Argentine space in the global accumulation of capital took the concrete form, in the case of the automotive industry, of the development of a specific modality of the valorisation of the capital of TNCs. Namely, these firms managed to valorise normally despite operating on a small scale and with obsolete technology, through the appropriation of a portion of the abundant (albeit strongly fluctuating) ground-rent and, in certain periods, a part of the value of labour-power.

This perspective also allowed us to explain the diverse phases in the historical development of the Argentine automotive industry. In this sense we argued that the development of the integral manufacturing of vehicles in the 1960s was linked to the development of automation at the global level, due to the necessity for the TNCs to relocate their older capital in order to accelerate technical change in their home countries. In the same way we argued that the crisis confronted by the Argentine automotive industry in the 1980s was principally determined by an increase in the technological gap resulting from the deepening of global technical change, together with the relative stagnation of ground-rent. Lastly, we explained the recent expansion of the industry through global transformations in the international division of labour. On the one hand, we showed that certain general elements related to the NIDL allowed for the counteraction of the increasing insufficiency of agrarian ground-rent; for example, the way in which the regionalisation of markets allowed for a relative increase in the scale of production, or how the worsening of the conditions of exploitation of the working class provided a new extraordinary source of profit for automotive capital. We also showed that these transformations combined with the survival of aspects linked to the CIDL (in particular, the expansion of agrarian exports and, as a consequence, of ground-rent), to enable the reproduction of the 'old' form of valorisation of automotive TNCs in Argentina.

APPENDIX: MOTOR VEHICLE INDUSTRY WAGES IN ARGENTINA AND THE UNITED STATES

	Nominal wage in Argentina (current ARS)	Real wage in Argentina (2005 ARS)	Nominal wage in USA (current USD)	Real wage in USA (2005 USD)	Absolute PPP (ARS/USD)	Wage domestic purchase power (ARG as % of USA)	Relative PPP (ARS/USD)	Value represented in wage (ARG as % of USA)
1960	1.90E-08	45261	6676	47044	3.51E-12	80.9	7.70E-12	36.9
1961	2.20E-08	46131	6756	47130	3.95E-12	82.3	7.98E-12	40.7
1962	2.44E-08	40112	7229	49922	5.01E-12	67.6	1.11E-11	30.4
1963	3.05E-08	40383	7583	51683	6.13E-12	65.7	1.38E-11	29.1
1964	3.96E-08	42833	7884	53041	7.39E-12	67.9	1.61E-11	31.2
1965	5.27E-08	44404	8281	54833	9.35E-12	68.1	1.95E-11	32.6
1966	6.97E-08	44511	8289	53360	1.20E-11	70.1	2.52E-11	33.4
1967	8.95E-08	44225	8221	51334	1.50E-11	72.4	3.31E-11	32.9
1968	1.07E-07	45591	n/a	n/a	1.68E-11	n/a	3.57E-11	n/a
1969	1.20E-07	47540	9476	53851	1.71E-11	74.2	3.38E-11	37.6
1970	1.26E-07	43667	n/a	n/a	1.84E-11	n/a	3.60E-11	n/a
1971	1.74E-07	44943	11201	56049	2.37E-11	65.5	4.82E-11	32.2
1972	2.50E-07	40735	12406	60152	3.64E-11	55.3	7.53E-11	26.8
1973	4.44E-07	45098	13432	61310	5.49E-11	60.1	1.15E-10	28.8
1974	5.94E-07	48661	13905	57161	6.15E-11	69.6	1.28E-10	33.5
1975	1.53E-06	44276	14954	56332	1.59E-10	64.2	3.78E-10	27.1
1976	5.86E-06	31153	17315	61673	8.19E-10	41.3	2.02E-09	16.7
1977	1.80E-05	34705	19407	64902	2.12E-09	43.7	4.87E-09	19.1
1978	4.94E-05	34572	n/a	n/a	5.44E-09	n/a	1.28E-08	n/a
1979	1.75E-04	47087	n/a	n/a	1.27E-08	n/a	2.49E-08	n/a
1980	3.88E-04	52039	24391	57809	2.24E-08	70.9	4.21E-08	37.8

(continued)

(continued)

	<i>Nominal wage in Argentina (current ARS)</i>	<i>Real wage in Argentina (2005 ARS)</i>	<i>Nominal wage in USA (current USD)</i>	<i>Real wage in USA (2005 USD)</i>	<i>Absolute PPP (ARS/USD)</i>	<i>Wage domestic purchase power (ARG as % of USA)</i>	<i>Relative PPP (ARS/USD)</i>	<i>Value represented in wage (ARG as % of USA)</i>
1981	7.52E-04	49356	26912	57820	4.15E-08	67.2	8.26E-08	33.8
1982	1.52E-03	37807	27488	55629	1.04E-07	53.5	2.08E-07	26.6
1983	8.28E-03	46298	n/a	n/a	4.46E-07	n/a	9.02E-07	n/a
1984	0.0862	66250	32481	61054	3.10E-06	85.4	6.59E-06	40.3
1985	0.51	51248	34695	62973	2.31E-05	64.1	5.42E-05	27.4
1986	0.99	51960	35203	62728	4.32E-05	65.2	9.04E-05	31.2
1987	2.27	51504	35085	60316	9.64E-05	67.2	2.03E-04	31.9
1988	9.79	50068	37702	62241	4.10E-04	63.3	9.69E-04	26.8
1989	297.98	47915	n/a	n/a	0.0124	n/a	0.0297	n/a
1990	n/a	n/a	42580	63625	0.28	n/a	0.73	n/a
1991	18182	44582	45394	65091	0.74	53.9	1.69	23.8
1992	25153	49380	43953	61182	0.90	63.6	1.90	30.0
1993	27253	48369	49506	66909	0.97	56.9	1.98	27.7
1994	30237	51513	56058	73872	0.98	54.9	1.98	27.2
1995	28042	46213	54414	69730	0.99	52.2	2.08	24.7
1996	25777	42414	55207	68717	0.96	48.6	1.91	24.5
1997	22830	37368	56975	69328	0.94	42.4	1.83	21.8
1998	22493	36494	53857	64528	0.94	44.5	1.86	22.5
1999	22620	37117	55694	65287	0.91	44.8	2.00	20.3
2000	26109	43249	58347	66173	0.87	51.5	1.81	24.8
2001	25188	42173	58913	64966	0.84	51.1	1.85	23.1
2002	22911	30477	64142	69632	1.04	34.5	2.49	14.4
2003	31266	36662	64937	68925	1.15	41.9	2.64	18.3
2004	41780	46919	65963	68199	1.17	54.2	2.65	23.9

2005	48547	48547	67341	67341	1.27	56.8	2.85	25.3
2006	58830	53049	65836	63775	1.36	65.5	2.97	30.1
2007	75361	60093	67242	63333	1.50	74.7	3.34	33.6
2008	91138	59258	67828	61526	1.77	75.8	3.88	34.6
2009	87354	49454	60889	55424	2.04	70.3	4.42	32.4
2010	128591	57846	68671	61497	2.53	74.1	5.41	34.6
2011	181971	66094	68715	59655	3.04	87.2	5.95	44.5
2012	208114	61136	67266	57213	3.68	84.1	7.26	42.6
2013	283146	66064	64486	54055	4.56	96.2	8.99	48.9

Sources and methodology

(1) 'Payroll' divided by 'all employees', data from Asociación de Fábricas de Automotores (various years). Calculated as average between total number of employees on 31/12 of corresponding year and total on 31/12 of previous year. Asociación de Fábricas de Automotores data excludes the parts and components industry

(2) 1960–2006: Consumer Price Index (CPI) published by Instituto Nacional de Estadísticas y Censos (<http://www.indec.mecon.ar/>); 2007–2013: CPI published by Dirección Provincial de Estadísticas y Censos, Provincia de San Luis (<http://www.estadistica.sanluis.gov.ar/>)

(3) 1960–1988: 'Payroll' divided by 'all employees', 'motor vehicles and equipment' industry, data from Bureau of the Census' 'Statistical Abstract' (<http://www.census.gov/compendia/statab/>). In order to estimate motor vehicle manufacturing wages only, we have added to the source data 3 per cent for 1960–1969, 6 per cent for 1970–1979 and 10 per cent for 1980–1989, based on the wage differential between 'motor vehicles' and 'motor vehicle parts' reported by Lewis and Bauer (1964), and Bureau of Labor Statistics (1976 and 1991). 1990–2013: 'Average hourly earnings for production workers' multiplied by 'weekly hours' worked, 'motor vehicle manufacturing' (NAICS code 3361), data from Bureau of Labor Statistics 'Current Employment Statistics'; we added 4 per cent to estimate 'all employees', based on differential between 'production workers' and 'all employees' reported in Bureau of the Census' 'Statistical Abstract', various years

(4) CPI published by Bureau of Labor Statistics

(5) Absolute purchasing power parity (absolute PPP) between Argentine peso and US dollar for the year 2005 is taken from World Bank (2008). 1960–2013 series calculated with previously mentioned CPIs. For the distinction between 'absolute' and 'relative' PPP, see Balassa (1964) and Officer (1978). For the justification of the utilisation of absolute PPP for the comparison of national real wages, see Inigo Carrera (2007: 31–2)

$$(6) = (1)/(5)/(3) \times 100$$

(7) Relative purchasing power parity (relative PPP) between ARS and USD calculated with the base period of 1960–1972, using previously mentioned CPIs. See Inigo Carrera (2007: 31–5) for the justification of the utilisation of relative PPP for the estimation of parity exchange rates between national currencies

$$(8) = (1)/(7)/(3) \times 100$$

NOTES

1. Data from Organisation Internationale des Constructeurs d'Automobiles (<http://www.oica.net>).
2. Note the distortion introduced by the greater proportion of workers dedicated to existing R&D activities in the core countries, which implies an underestimation of the productivity of labour effectively applied in direct production in those countries.
3. During just a few years, the automotive TNCs located a significant part of their production in the Mexican market. For example, in the period 2004–2005, 45 per cent of automobile exports were destined for Mexico. However, note that these exports are carried out in a market of preferential agreement (Acuerdo de Complementación Económica N°55) that regulates trade exchange without tariffs in the process of a regime of compensation on imports and exports, similar to that which is in effect for the regional market.
4. The Mercosur tariff is 35 per cent. The tariff is 2.5 per cent in the USA, 0 per cent in Japan and 10 per cent in the EU (López 2007: 35).
5. This term is not synonymous with 'surplus profits' (Marx 1991: 279, 300–1), insofar as the obtainment of extraordinary profits is not necessarily expressed in above normal profits, but fundamentally in obtaining normal profits despite producing in backward conditions.
6. We are assuming, for the moment, that automotive firms must purchase their means of production at least at prices of production, discounting at this level of analysis the possibility of the reduction of costs related to constant capital.
7. From 1960 to 2007 the Argentine state annually appropriated, on average, 20 per cent of the total ground-rent that flowed out of agrarian production, with peaks of 50 per cent in some periods (see Iñigo Carrera 2008).
8. See Appendix for methodological references.
9. We take the US sphere of capital accumulation as the most immediate expression of normal conditions of the exploitation of labour-power. Automotive wages in the USA were historically the highest in international terms. Other countries, as in Europe and Japan, had lower wages in the 1960s and 1970s. But these lower salaries corresponded with less qualified labour-power. In fact, Japanese and European labour-power was put into production on a massive scale only when automation simplified the labour process and enabled the incorporation of these lesser-qualified workers. Progressively (although slowly), the wage difference between the 'classic' European countries (Germany, France, and the UK) and Japan compared with the USA was reduced, as the attributes of their respective working classes tended to converge. If one takes into account that the Argentine

automotive industry tended to be backward in terms of the incorporation of technical innovations relative to all the classic industrial countries (ruling out the skill-level of labour-power as a possible explanation of Argentine lower wages), it is therefore adequate to take the US wage as an expression of the norm in the payment of labour-power or, in other words, as an indicator of the value of automotive labour-power.

10. There is insufficient data on the working day, and there are complications inherent in the separation between intensity and productivity.
11. Using the method of absolute purchasing power parity (see Appendix).
12. There certainly exist other complementary forms of the appropriation of rent by TNCs, such as direct subsidies, tax exemptions, and lines of cheap credit, all of which resulted from different regimes of promotion of the sector implemented by the national state. For reasons of space, the examination of these other forms of transfer of ground-rent to automotive capital falls outside the focus of this chapter.
13. Other Latin American countries, and Brazil especially, show similar characteristics. In contrast, the automotive industry in East Asian countries (Japan and South Korea especially) were based on the development of more modern systems of production and the emergence of new individual capitals. See Grinberg (2011) for a comparison between Brazil and Korea.
14. The transfer of complete production lines by Kaiser Motors from the USA to Argentina (and Brazil) has been well studied and documented (see MacDonald 1988, for instance), as has the use of second-hand machinery on the part of General Motors and Ford (Jenkins 1984: 52). On the other hand, a study by the Asociación de Fábricas de Automotores shows that until 1967 a quarter of the total machinery used was over ten years old, which implies that it was second-hand when the first plants were established. Other evidence which supports the same conclusion can be found in a government survey from the early 1970s (reproduced in Sourrouille 1980, Table 27), in which Ford, General Motors, Chrysler, Fiat, Citroen, and Mercedes Benz are confirmed as having built their Argentine plants through the adaptation of existing technology from their countries of origin. The most prominent studies of the industry also agree on this point (Jenkins 1984: 52; Nofal 1989: 90–1; Schvarzer 1993; Sourrouille 1980: 169).
15. Note that the productivity of labour in the Argentine automotive industry remained practically unaltered for decades (in 1990 it was only 12 per cent greater than in 1960, according to the Asociación de Fábricas de Automotores 1996).
16. It should be noted that this regression in the real wage coincided with the moment in which the automotive TNCs deepened the relative modernisation of the productive process and the reorganisation of labour relations. Between

1994 and 1998, new automotive production plants were opened and the first collective labour agreements were signed that incorporated new—more flexible—forms of the organisation of the labour process (Guevara 2010: 123).

17. According to calculations by Iñigo Carrera (2011: 56), the annual average of agrarian ground-rent between 2003 and 2010 was 53 per cent greater than between 1991 and 2001, and 83 per cent more than in 2002.

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Patterns of ‘State-Led Development’ in Brazil and South Korea: The Steel Manufacturing Industries

Nicolas Grinberg

The experiences of Brazil and South Korea have occupied a central place in the field of the comparative political economy of late-industrialisation. Both countries have been considered paradigmatic, since both have arguably enjoyed the strongest and deepest processes of industrial development among Latin America’s and East Asia’s newly industrialising countries. Most scholarship on the countries has settled on different versions of institutionalism that acknowledge the extended role played by the state in Brazil’s and Korea’s development processes, and which focus on the quality of state institutions as the most relevant factor in explaining their divergent experiences (Grinberg 2013a, 2014). Yet, despite their obvious differences, all mainstream accounts on the comparative political economy of Brazilian and South Korean development share one key theoretical starting-point that renders them equally incapable of fully accounting for the underlying forces. In a nutshell, they all regard the process of capitalist

N. Grinberg (✉)

Institute for Advanced Social Studies, National University
of San Martín, Buenos Aires, Argentina

development as a nation-based process and the world market as the context where the national processes of capital accumulation develop with different degrees of politico-economic autonomy.

The goal of this chapter is to offer an alternative account to the mainstream, institutionalist view on the state-led process of economic development in Brazil and South Korea, taking as its starting-point two key insights from the Marxian critique of political economy. First, that the process of capital accumulation is global, rather than national, in terms of its general dynamics and historical potencies; and, second, that inter- and intra-state political processes are forms of realisation of the process of capital accumulation on a global scale, through the specific determination of each national portion of the total capital of world society (see Chap. 2). The chapter is organised as follows. The second section advances a brief explanation of the general trends of the process of capital accumulation in Latin America and East Asia. The third and fourth sections review the main politico-economic forms of the Brazilian and Korean processes of capitalist development since the end of the Second World War (WWII). The fifth and sixth sections analyse the development of the steel industry in both countries. This industry has not only played a central role in the process of industrialisation in both countries, but has also been at the core of state actions to promote the process. For these reasons, the steel industry has figured prominently in studies of Brazilian and Korean comparative development (see Auty 1991; D'Costa 1999a, b). The final section closes the chapter with a summary of its main points and conclusions.

GLOBAL ACCUMULATION OF CAPITAL AND DEVELOPMENT IN LATIN AMERICA AND EAST ASIA¹

The development of labour productivity is the most powerful lever of the accumulation process. It results in the reduction of wages necessary for a given quantity of labour-power, extensively or intensively spent—that is, in the production of relative surplus-value. The mechanisation of large-scale industry is, in turn, the most potent form of increasing labour productivity. This process is centred on the transformation of the productive potencies of individual labour-processes into a scientifically organised, although alienated, social power (Iñigo Carrera 2013: 15–23; Marx 1976: 508–17; Postone 1996: 336–49). Yet capital makes every effort to avoid this expensive and risky process by searching for locations where particular natural or historical conditions allow it to reduce the cost of producing the

commodities that are directly or indirectly consumed by the labour-force and thus increase the mass of surplus-value available for its valorisation. Hence, beyond the formal expansion of markets, the global unity of capital accumulation is only fully developed in the process of the production of relative surplus-value (Iñigo Carrera 2013: 145–51).

Originally this process centred on the search for regions where, due to uncontrollable natural conditions, primary commodities could be produced and, if their production were possible elsewhere, at a lower cost—giving place to the classical international division of labour (CIDL) (Howe 1981, 91–4; Iñigo Carrera 2013: 145–6; Marx 1976: 579–81). This form of integration of portions of the planet into the global circuits of accumulation, however, was riven with structural contradictions that determined the long-term pattern of capitalist development therein. If the total social capital managed to enhance its valorisation capacity by reducing the value of labour-power, this was then partly offset by the drain of surplus-value flowing into the pockets of landowners in the form of ground-rent (see Chap. 3).² Global industrial capital therefore became compelled to overcome this barrier to its own capacity to accumulate by reshaping those spaces of valorisation to recover part of that surplus-value through the establishment of an antagonistic association with local landowners. From being simply a source of cheap raw materials, these spaces of accumulation—among which Latin America figured prominently—also became determined as sources of surplus-value in the form of ground-rent (Iñigo Carrera 2013: 145–50; Grinberg and Starosta 2014: 241–2).

The accumulation of capital through the recovery of ground-rent has taken a variety of economic and political forms; all of them involving the mediation of the national state. Until the 1930s, approximately, the alliance between capital and landowners over the appropriation of ground-rent generally revolved around the production, transport, and international trade of one or more primary commodities. Then the capitals that invested in these and related sectors, as well as foreign creditors to the emerging nation-states, became landowners' main partners in the appropriation of local ground-rent. But then, from the 1930s and crucially after the end of WWII, this position was taken over by industrial capital invested in manufacturing, in whose valorisation cycle originated the bulk of the surplus-value that formed the ground-rent (Iñigo Carrera 2013: 149–52).

The modality of ground-rent recovery by capital invested in manufacturing has determined the long-term development of the process of industrialisation in these parts of the world in a specific form. In general

terms, and in order appropriate ground-rent, industrial capital has had to open and close its valorisation cycle in these countries' domestic markets. With a scale of production below world-market norms, and the use of vanguard technology thus restricted, such markets have had to be protected to a degree conditioned by the amount of ground-rent available to sustain local industrial production (see Chap. 8). Industrial capital's accumulation capacity therefore has been dependent on the evolution of the ground-rent available to compensate for the ever-growing difference between local and world-market production costs resulting from the difference between local and world market scales of production.

The, so-called, process of import substitution industrialisation (ISI)—that was consolidated in most primary-commodity producing countries between the 1930s and 1950s reached its peak during the 'commodities boom' of the 1970s, and was reproduced in a limited form thereafter—has been the paradigmatic form through which this specific modality of capital accumulation has come about. In general terms, two types of indissolubly united policy-created mechanisms have shaped this process. First, state policies—such as exchange-rate overvaluation, commodity-export taxes, and regulations on primary-commodity circulation—have intervened in the turnover cycle of primary-sector capital, separating a portion of ground-rent and interrupting its flow toward landowners' pockets. These policies have channelled that portion of ground-rent to industrial capital profits—lowering the domestic prices of foreign exchange, raw materials, and labour-power—or, in a first instance, to the state. Second, other policies have enabled the effective appropriation of the separated ground-rent by industrial capital when selling in domestic markets. These have included its protection from foreign competition and direct state actions, such as the provision of inputs at below-market prices, the purchase of output at above-market prices, the enlargement of markets through overstaffing, and outright subsidies. In other words, policies associated with ISI and the political processes through which they have come about have been the specific politico-economic forms of realisation of processes of accumulation based on the appropriation/recovery of ground-rent by global industrial capital.

As in all other regions participating in the global economy as primary-commodity producers, the process of capital accumulation in Latin America has, since its origins, revolved around the appropriation of ground-rent by different social subjects, crucially its recovery by industrial capital.³ The Brazilian economy has not been an exception to this general

trend. Conversely, given the relatively large size of the local ground-rent, the process of capital accumulation in Brazil has been paradigmatic of this specific form of capitalist development (Grinberg 2013a, b).

During the last forty years, however, the international division of labour has experienced a profound transformation as a result of the process of computerisation and robotisation of large-scale industry and, especially since the mid-1970s, of the microelectronics revolution (see Chap. 4; also Iñigo Carrera 2013: 66–70; Grinberg 2013a). This leap forward in the process of automation of labour's productive attributes has greatly accelerated the internal differentiation of the collective worker in large-scale industry. On the one hand, technological transformations have involved the further expansion of the productive attributes, and hence cost, of wage-labourers performing the more complex parts of the work process. On the other hand, automation has simplified the productive functions, and hence cost, of most manual labourers remaining on the shop-floor as operators or appendages of increasingly self-calibrating and self-adjusting machines. Moreover, the new technological conditions have themselves generated a multitude of production processes still subject to manual intervention by low-skilled labourers, like the assembly, testing, and packaging of electronic micro-components and appliances (Balconi 2002; Coriat 1992; Grinberg 2013a: 180–2).

In terms of their general dynamics, those transformations in the productive attributes of the collective worker in large-scale industry have been global. Yet they have resulted in a novel differentiation of national spaces of accumulation and in the reconfiguration of the international division of labour, and hence of the production of surplus-value on a global scale. Based on those transformations in the labour process, and the associated revolution in communication and transportation methods, industrial capital has been increasingly able to disperse spatially the different parts of the labour-process according to the most profitable combinations of costs and productive attributes of the different national fragments of the global labour-force, thus giving birth to the NIDL (Iñigo Carrera 2013: Chap. 2; Grinberg and Starosta 2009; Grinberg 2013b).

As a general trend, the NIDL has revolved around the relocation of simplified labour-processes to places where industrial capital had access to labour-forces that are not only *relatively* cheap, but also whose specific productive attributes include the disciplined subordination to centrally and hierarchically organised collective labour-processes, as in the wet-rice cultivating societies of East Asia (Bray 1986: 67). Those characteristics have

made the East Asian labour-force particularly productive as an appendage of increasingly automated machinery systems or in manual assembly operations; hence the region's ubiquitous participation in the NIDL and its consolidation as a global industrial power (Iñigo Carrera 2013: 63–70, 74–80; Grinberg and Starosta 2009; Grinberg 2013a).

Initially, the NIDL manifested itself in the spatial relocation of 'labour-intensive' productions, like clothing manufacturing—in which, due to the early introduction of skill-replacing technical changes the labour-force functioned as an incipient appendix of the machinery—and the electronics industries—which worked with manual-assembly operations (as identified by Fröbel et al. 1980). Through the mid-1960s, however, skill-replacing technical changes began to affect 'capital-intensive', continuous-flow production in the heavy and chemical industries, transforming manual workers in those sectors into an appendix of the machinery. A decade later, as the microelectronics revolution took hold of large-scale industry—crucially through the robotisation of assembly operations—skill-replacing technical changes began to increasingly affect 'technology-intensive', serial mechanical production in the consumer durables and capital goods industries (Balconi 2002; Brown and Campbell 2001; Coriat 1992; Ernst 2005; Hasegawa 1996). As this occurred, production in those sectors tended to move to Japan and the, so-called, East Asian Tigers—the original participants of the NIDL—and labour-power therein increased in quality and cost. Industrial capital then sought out new spaces, in the region and beyond, where it could gain access to cheaper, and equally disciplined and acquiescent, workforces for lower-skill production in the light industries and subsequently, as the dynamics of technical change allowed, in durable and capital goods production (Grinberg 2014: 719–21).

As in any other form of realisation of the process of capital accumulation on a global scale, the NIDL has come about through specific nation-level political developments. The, so-called, developmental state has been the most characteristic political form mediating the development of East Asian processes of capital accumulation as an expression of the NIDL. Despite different national singularities, all East Asian developmental states not only facilitated the outward orientation of industrial capital while nurturing infant industry. But they have also decisively pursued the political repression of the working class, thus allowing capital to purchase labour-power below its value and to differentiate the conditions of reproduction of the various parts of national workforces according to their productive attributes. Due to its sizable labour-force and early participation in the

process, the experience of South Korea has been paradigmatic of this specific modality of capitalist development, through which the production of relative surplus-value on a global scale has come about (Grinberg and Starosta 2009; Grinberg 2013a, 2014).

This modality of capital accumulation has shown a remarkable developmental potency, especially in the cases of Japan and the East Asian Tigers. Yet it is not free of contradictions. Not only has the dynamism of skill-replacing technical changes resulted in an ever-deeper 'race to the bottom'. More importantly, the productive attributes upon which this specific modality of capital accumulation has rested (discipline and acquiescence) are at odds with those required from wage-labourers performing vanguard scientific research and technology/product development. This high-value creating part of the labour process, in which the development of society's productive forces comes about, has thus been relatively undeveloped in those countries participating in the global economy in this specific form.

BRAZILIAN CAPITALIST DEVELOPMENT SINCE WORLD WAR II⁴

When WWII ended, the Brazilian process of ISI was at least half a century old. The industrial sector was then populated by a myriad of small, nationally owned capitals and a few relatively large, foreign-invested firms which had been established between the end of WWI and the Great Depression. Both types of industrial capital had grown, initially, thanks to a combination of market protection and exchange-rate overvaluation allowing them to appropriate ground-rent and, subsequently, to the collapse of international trade. Between the end of WWII and the mid-1950s, Brazilian ground-rent experienced a substantial recovery and the process of capital accumulation manifested itself in the strong expansion of local industrial production, crucially by indigenous private capital. Yet, in contrast to the pre-WWII experience, it also came about through the creation of a large number of state-owned enterprises (SOEs) and developmental banks, in some cases through the nationalisation of public utility and transport companies into which most foreign investment had previously flowed. SOE activities, combined with market-protection reinforcement and exchange-rate overvaluation, shaped the 'state-led', or 'statist', ISI process through which the appropriation of ground-rent by social subjects other than landowners, notably industrial capital, would come about (on the genesis of statist ISI, see Kohli 2004: 177–82; de Paiva Abreu 2008:

320–33). Though both types of capitals—small-private and state-owned—would subsequently support the valorisation processes of foreign-capital subsidiaries, those developments were realised through the consolidation of a nationalist state backed by the, so-called, populist alliance between the local bourgeoisie and the urban working class, especially during the commodities boom associated with the Korean War, when the ground-rent available to support the process of capital accumulation grew strongly (Grinberg 2013a).

Through the mid-1950s, however, some of the features of Brazilian capitalist development started to change when large flows of foreign-owned capital, then pursuing a new phase of global expansion, began to invest in the most dynamic parts of the local industrial sector, attracted by the substantial growth of domestic markets that enlarged ground-rent had given rise to. Unlike in the previous period of ISI, a nationalist government with an anti-foreign capital rhetoric could not politically mediate this process. Populism therefore gave way to ‘developmentalism’, and economic growth revived strongly (Anglade 1985: 56–7; Avelãs Nunes 1990: 188–93; Kohli 2004: 183–4; Skidmore 2007: 146–9).

Yet, despite robust growth and rapid industrial development occurring in the period to the late 1950s, the limited and contradictory dynamics of the Brazilian process of capital accumulation soon led to a crisis as the ground-rent available for appropriation contracted while primary-commodity prices collapsed in the aftermath of the Korean War. Initially, a new source of extraordinary surplus-value in the form of loanable-capital inflows began to complement ground-rent in sustaining the process of capital accumulation through ISI. Foreign credit, however, soon proved to be insufficient and unreliable (Avelãs Nunes 1990: 210–11; Frieden 1987: 99) and a third source of extraordinary surplus-value thus developed; that arising from the payment of manual workers’ labour-power below its value (Zurron Ocio 1986: 8–11). This new transformation in the forms of a realisation of the Brazilian process of capitalist development did not come about smoothly. Rather, it was realised through an economic crisis that expressed the intrinsic limits of the Brazilian process of capital accumulation and the replacement of the populist alliance with a military dictatorship as its general political form of realisation (Kohli 2004: 190–210; de Paiva Abreu 2008: 349–59; Skidmore 2007: 187–302).

During the 1970s Brazilian ground-rent, and the inflow of loanable capital complementing it, experienced a strong, though irregular, expansion. The production of industrial goods advanced to include complex

durable-consumer goods, as well as various types of equipment and basic inputs (Batista 1992; Barros de Castro and Souza 1985). The expansion and deepening of the ISI process was manifest in sharp increases in employment and real wages in the manufacturing sector. The authoritarian regime in charge of the political representation of the process of capital accumulation thus softened its grip over the working class, while economic policies regained their developmental features through the implementation of a series of industry-wide and sector-specific promotion plans aimed at boosting private domestic capital and SEOs (Anglade 1985; Corrêa do Lago et al. 1979; Skidmore 1988) as a form of transferring ground-rent, and loanable-capital inflows, to industrial capital. The mass of surplus-value appropriated by industrial capital increased strongly and economic growth thus accelerated.

Despite these developments, through the early 1980s the Brazilian economy entered a long period of weak growth, deindustrialisation, and recurrent economic crises. Primary-commodity prices then began a process of long-term decline, only partly reversed after the commodities boom of the late-2000s, which negatively affected the growth of local ground-rent. And, although credit supply expanded on a global scale thereafter, as 'developed-country' states have increasingly attempted to sustain consumption through easy-credit policies, loanable-capital inflows to Brazil have been irregular. To begin with, these were only re-established in the early-1990s, when the global supply of credit had grown sufficiently to, once again, reach non-'core' economies. Secondly, the expansion of global credit itself has not been constant. On the contrary, it has proceeded in a succession of periods when easy-credit policies resulted in loose monetary conditions that fuelled global growth, punctuated by periods when credit policies became more stringent as a means of addressing ensuing inflationary pressures (Brenner 2006: 143–63, 267–343; Iñigo Carrera 2013: Chap. 6).

The relatively slow growth of the combined mass of ground-rent and loanable-capital inflows led to a partial reversal in the process of state-led ISI through which their appropriation by industrial capital had come about. In other words, as these sources of extraordinary surplus-value reduced, relative to the demands placed upon them by industrial capital looking to valorise normally, state policies channelling them were partly or fully withdrawn. Market protection was reduced for some sectors and eliminated for others while SOEs were privatised. Neoliberalism thus replaced developmentalism as the general political and ideological form

of realisation of the Brazilian process of capital accumulation which, nevertheless, continued to revolve around the recovery of ground-rent by global industrial capital.⁵ In the post-1980 period, therefore, the state-led process of ISI became increasingly more limited, and industrial capital began to find a new source of extraordinary surplus-value to complement the ground-rent and loanable-capital inflows, the general payment of labour-power below its value.

The neoliberal restructuring of the ISI process started, incipiently, in the early-1980s, during the last years of the military government, and its deepening became the task of successive post-1990 democratic governments. After a decade-long weak economic performance and worsening labour-market conditions, there was no longer need for capital to rely on—politically expensive—authoritarian solutions to lower wages, deal with unemployment-related unrest, and divest state assets at fire-sale prices—all of which have been forms of realisation of the Brazilian process of capital accumulation during the period of *relatively* low rent.

KOREAN CAPITALIST DEVELOPMENT SINCE WORLD WAR II⁶

During the two decades following the end of WWII, the structure of the Korean economy did not qualitatively differ from Brazil's, where capital accumulated through the recovery of ground-rent. This specific modality of capital accumulation came about, as in Brazil and elsewhere, through a set of state policies 'promoting' ISI. The singularity of the Korean ISI process resided in the fact that the limited available ground-rent was complemented with a portion of small agrarian capital's profits and foreign-aid inflows. The limited character of the Korean ISI process, especially *vis-à-vis* the Brazilian experience, thus resulted from the relatively small size of extraordinary surplus-value available to support industrial capital's valorisation process (on the Korean ISI process, see Frank et al. 1975; Krueger 1979: Chap. 2).

Through the mid-1960s, however, the Korean process of capitalist development began to experience a structural change, as a result of the aforementioned transformation in the production of relative surplus-value on a global scale leading to the NIDL. Between the mid-1960s and the mid-1970s changes in the Korean economy resulted largely from the continuous appreciation of the Japanese industrial workforce as the global process of capital accumulation transformed Japan into a producer of

consumer-durable goods, industrial inputs, and equipment. The Japanese labour-force was then increasingly replaced by new sources of relatively cheap and disciplined labour-power available in East Asia, which was capable of performing simple manual labour-processes in the textile, apparel, and electronics industries. After the mid-1970s, the transformations experienced by the Korean economy resulted not only from the further appreciation of the Japanese labour-force, but also, and crucially, from the direct impact of the contemporary processes of skill-replacing technical change, initially in process industries like steel and chemicals and subsequently, especially after the microelectronics revolution, in such serial production sectors as motor-vehicles, home appliances, and consumer electronics. Moreover, the Korean labour-force thereafter became itself a direct product of the process of capital accumulation; its quality was, thus, continuously improving through on-the-job experience and, increasingly, state mediation. As economic activity moved into higher value-adding sectors, the production of surplus-value expanded and the process of economic growth accelerated (Iñigo Carrera 2013: 76–82).

Three types of policy sets thus mediated the structural transformation of the Korean process of capitalist development throughout the 1960s and 1970s. First, some policies enhanced the export orientation of local industrial capital; second, other policies accelerated both the concentration of industrial capitals and the extent to which they became capable of normal world-market production; and, third, some policies mediated the reproduction of the local workforce with the characteristics and price needed for such activities. In general terms, the degree of direct state regulation of the Korean economy increased as the process of capital accumulation on a global scale changed the conditions of valorisation of capital in Korea in the direction of 'fixed-capital-intensive' industries like durable-consumer and heavy-industry goods. A relatively economically 'liberal', yet politically repressive, state mediated the emergence and initial development of the Korean export-oriented industrialisation (EOI) process during the 1960s. This process required large amounts of low-cost, unskilled labour-power and relatively low-cost fixed-capital investments. The provision of state guarantees for local firms' international-borrowing activities (for example, in the textile industry) and the establishment of foreign-capital subsidiaries (for example, in the microelectronics industry) were then sufficient to develop industrial capital for world-market production. In contrast, the emergence and subsequent development of durable-consumer goods and heavy-industry sectors came about through the consolidation of a

nationalist ‘developmental state’ that not only disciplined while upgrading labour, but also accelerated the concentration of industrial capital to reach world-market scales, either through the provision of credit to private firms by state-owned banks or, as in the case of the steel industry, the centralisation of capital under direct public ownership. Moreover, policies protecting the long-maturing industries replaced the more liberal trade regime prevailing during the initial, light-industry-based stages of the Korean EOI process (for policy analyses, see Kohli 2004: 87–122; Krueger 1979: 99–138; Michell 1988: 61–8).

As in many other ‘developing’ countries, the early-1980s global recession triggered a process of financial sector and foreign trade liberalisation in Korea. However, unlike in Brazil and Latin America generally, this was not a political expression of the inability of the local ground-rent to sustain a diversified, domestic market-oriented industrial capital (Grinberg 2010). The strong growth and development of the Korean EOI process continued after the 1980–1982 recession, even in the context of raising wages. Liberalising reforms in Korea were, in the main, an expression of two other trends. First, the maturation of parts of its industrial sector which no longer required extended market protection and state support for their normal reproduction (for example, light industries). Second, the phasing out of other parts that proved to have had limited commercial potential (for example, aluminium and heavy-machinery industries) and of excessive productive capacity in potentially viable sectors (for example, shipbuilding). Meanwhile, during the 1980s, ‘nascent’ industrial sectors (for example, microelectronics and motor-vehicles) continued to be strongly supported by the state (Chang et al. 1998: 740; Green 1992: 416; Mathews and Cho 2000: 119–35), while, at the same time, developing the capacity to compete in world markets on the same basis as the large-scale heavy and chemical industries—namely, through the use of a *relatively* cheap and disciplined labour-force for simplified productive processes (Bello and Rosenfeld 1992: 113–18; Williams et al. 1994: 61–3).

Neoliberal reforms in Korea also contrasted with contemporary OECD country experiences, where they mediated the differentiation in the conditions of reproduction of the various fragments of the local industrial labour-force (see also Chap. 7). During most of the 1980s, wage differentials among Korean industrial workers declined, albeit from a highly unequal base (Lee and Lindauer 1997: 60–4). Manual workers’ wages increased strongly across the board as the industrial base ‘deepened’, and so did the

demand for more skilled labour-power that could no longer reproduce itself normally under wage conditions corresponding to its peasant origin. This process came about through a period of political opening up and the sharp, though short-lived (1987–1990), increase in working-class activism, crucially by core manual workers (Koo 2001: 153–87).

During the 1990s the Korean economy continued its growth process and its path of 'upgrading' to high-technology industries (Mathews and Cho 2000: 135–47), as a form of realising the production of relative surplus-value on a global scale through the NIDL. Though this new deepening of Korea's industrial sector resulted from the same global-scale economic forces as the previous development of light and heavy industries, it required a lower degree of direct state regulation of productive activities. As industrial capital matured, reaching world market standards, both market protection and the state's support of private-firm funding activities were no longer necessary. On the contrary, capital-account liberalisation became necessary to capture a portion of the expanding global credit supply, which was vital in funding the rapid upgrading of Korean industrial firms in light of emerging competition in world markets from firms located in countries with large supplies of cheaper and, arguably, equally disciplined labour-power (such as in China and Southeast Asia). As an expression of the economic transformations at stake, the 'neoliberal state' replaced the developmental state as the general political representative of the South Korean process of capital accumulation (Shin 2003: 136–70).

Although economic growth remained strong during the 1990s, these developments—that is, the surge of new competitors in global markets and the increasing reliance on external debts to fund investments—expressed the inherent limitations of the Korean process of capital accumulation. Indeed, when in the late 1990s the global process of overproduction of capital became manifest in the East Asian crisis, and demand for Korean exports slowed markedly, while the supply of credit to 'emerging markets' retrenched sharply, the South Korean economy entered its most severe crisis since the end of the 1950–1953 Civil War (Grinberg 2015). And, though in the post-crisis decade the Korean economy underwent a strong export-led recovery that was manifest in further industrial deepening, this process was, unlike in previous periods, supported with a strongly undervalued currency and an increasing, rather than decreasing, degree of labour-market fragmentation and precariousness (Chang and Chae 2004; Moon and Rhee 2009).

THE BRAZILIAN STEEL INDUSTRY⁷

Brazil has a long history of large-scale integrated production of steel. Import substitution efforts in the sector began in the 1930s and expanded significantly during the 1940s under active state promotion. In 1941, after plans for the creation of a privately run project with foreign capital participation failed, the state-owned Companhia Siderúrgica Nacional (CSN) was finally incorporated. Five years later, Latin America's first fully integrated steel mill was completed in Volta Redonda, Rio de Janeiro, close to the country's major industrial areas and iron ore mines (Baer 1969: 68–79; Dahlman 1978: 34–9, 94–5; Fisher et al. 1988: 166–8).

State intervention in the industry increased during the 1950s developmentalist drive with the creation, and subsequent expansion, of a number of companies and plants, including Cosipa in Sao Paulo and Usiminas in Minas Gerais. Though controlled and partly funded by regional governments, these, as with CSN before, received substantial amounts of federal resources channelled through the National Development Bank (BNDE). Usiminas also incorporated the participation of Japan's Nippon Steel (Amarante de Andrade and da Silva Cunha 2003: 5; Dahlman 1978: 40–9).

As in many other developing countries, the declared goal of Brazilian steel SOEs was not only to achieve self-sufficiency in such a critical product for industrial development and national defence, but also to support downstream industries, like machinery, motor-vehicles, shipbuilding, construction, and railways; all of them key sectors in the ISI programme (Amann et al. 2004: 9; Baer 1969: 83; Fisher et al. 1988: 226). The economic content of that policy, however, differed from its ideological forms of realisation. State-owned steel mills in Brazil would act, as all other SOEs, as a medium for the transfer of ground-rent from landowners to industrial capital, crucially by selling subsidised outputs, buying inflated inputs, and by employing an overextended workforce. Moreover, but in contrast to other SOEs, they would also become an active medium for the transfer of ground-rent to industrial capital materialised in the price of iron ore, which was substantial given the country's large availability of low-cost, high-grade mineral deposits. A dual structure thus developed in the Brazilian steel industry, with state-owned integrated mills specialised in flat products, and private firms, mostly operating electric-arc furnaces, specialised in long products and using low-cost raw steel supplied by the former as their main input (Amann et al. 2004: 10). Under these

structural conditions, the industry's development depended thereafter on the evolution of ground-rent, complemented by foreign credit, available to support the limited process of capital accumulation.

After growing rapidly for almost two decades, in the early 1960s the Brazilian steel industry, and in particular the state-controlled sector, entered a period of sluggish growth, as did most of manufacturing. As explained above, the growth of ground-rent then stagnated while external credits dried up. The downturn, however, was short-lived. By the end of the decade, the, so-called, Brazilian economic miracle was underway and the steel industry thrived again while resources to fund state investment were enlarging. In 1971 the long-delayed National Steel Plan was launched to coordinate investment and consolidate the sector to take advantage of economies of scale. To this end, it intended to create a holding company to embrace all SOEs and the National Steel Fund to finance the sector's expansion, although this never fully materialised. The Plan also reaffirmed the market division between state and private firms, and aimed to use 20 per cent of local capacity for export production (Amarante de Andrade and da Silva Cunha 2003: 5–6; Dahlman 1978: 95–8).

By the mid-1970s, the sector's recovery gained momentum and entered a second period of heavy investment. With ground-rent and credit inflows growing strongly again, steel companies received substantial state support under the auspices of the Second National Development Plan (NDP II 1975–1979) that aimed to promote further substitution of industrial inputs and capital-goods imports. In 1975 all steel SOEs finally came under the control of the holding company Sidebras, which, subsequently, also absorbed a number of small privately owned firms manufacturing specialty products (Dahlman 1978: 98–103). Large investments in productive facilities were thereafter undertaken by both state-owned and private-sector firms (Amarante de Andrade and da Silva Cunha 2003: 9). In the state sector the 1970s saw not only the further expansion of CSN, Usiminas, and Cosipa, but also the establishment of two new large mills, Tubarão Steel Company (CST) and Açominas. The former, a joint venture between the Brazilian state, Japan's Kawasaki Steel and Italy's Finsider, was constructed following the Japanese/Korean model in the coastal city of Vitoria with the purpose of exporting semi-finished slabs (D'Costa 1999b: 6–8). The latter was to produce finished and semi-finished products for both domestic and export markets. During this period, several wholly privately-owned firms also emerged, while others expanded their operations (Amann et al. 2004: 10; Dahlman 1978).

The Brazilian steel industry suffered in the debt crisis of the early 1980s, along with the rest of the manufacturing sector. Yet, by the mid-1980s, it was at the forefront of a short-lived export-led economic recovery that prompted several commentators to claim that the investments undertaken through the NDP II had finally succeeded in transforming the structure of the Brazilian economy by creating a self-sufficient, internationally competitive industrial sector (see Barros de Castro and Souza 1985). The reality of the Brazilian economy, however, could have not been more different, as the case of the steel industry makes clear. Labour productivity remained low by world-market standards and thus labour costs remained high, partly due to the low level of equipment automation and partly due to overstaffing in state-owned mills. Though the industry's expansion under the auspices of, and massive funding received from, the NDP II had allowed Brazilian steel SOEs to attain the lower end of the theoretical minimum efficient scale of production, this was well below the scale of Japanese and Korean plants with which they were competing (D'Costa 1999a: 89, 97; Fisher et al. 1988: 300). International markets could only be conquered thanks to a strong undervaluation of the national currency prevailing in the mid-1980s, the low local cost of iron ore and hydroelectricity, and the export subsidies that remained in place.

As can be observed in Table 9.1, in 1985 Brazilian average operational costs for the production of steel were, at exchange rates that reflected the relative evolution of the local currency to reflect value, substantially above those in Japan, Germany, and Korea. When depreciation expenses are considered, this cost disadvantage worsened further as Brazilian integrated mills had been purchasing equipment and contracting construction services from local companies at substantially inflated prices (Mendes de Paula 1993: 46). During the late 1960s, and crucially the 1970s, the local supply of highly-priced industrial equipment increased substantially under the auspices of various programmes implemented to deepen the ISI process, including the market reserve granted to local manufacturers (Amann 1999: 338–9). While construction costs of Korea's POSCO plant averaged USD500 per 1000 tons of annual production capacity, they reached USD1000 in Açominas and USD3000 in CST (D'Costa 1999b: 99).

The combination of high fixed-capital costs, overstaffing, and low-priced output affected the profitability of Brazilian steel SOEs. In 1985 the profit rate was –3.5 per cent for Açominas, producing a mixed output mainly for the domestic market, and –0.83 per cent for CST, producing slabs mostly for external customers. Their profit rates in the mid-1980s

Table 9.1 Cost of producing cold-rolled coil (USD per ton of finished product)

	Korea					Japan					Brazil				
	1985	1991	1996	2003	2003 ^a	1985	1985 ^b	1991	1996	2003	1985	1985 ^c	1991	1996	2003
Labour costs	25	67	89	59	106	63	40	145	167	116	26	42	82	70	44
Main raw materials	103	153	148	124	124	96	96	141	142	113	92	148	150	148	105
Other materials	142	156	156	137	137	127	127	189	201	149	156	156	186	160	114
Total	270	376	393	320	367	286	263	475	510	378	274	346	418	378	263
operational cost															
<i>Efficiency indicators</i>															
Man hour/ton	8.2			3.9		5.4	3.5			3.1	9.0				4.4
Continuous casting (%)	63.3	96.4	98.5	98.5		91.1	100	94.4	96.2	97.7	43.7		56.0	72.8	91.9

^aParity exchange rates

^bState-of-the-art facilities

Sources: data from Barnett and Crandall (1986); *World Steel Dynamics* (various issues)

would have been around 16.3 per cent and 6.8 per cent, respectively, were these companies paying international prices for their fixed-capital investments.⁸

During the late 1980s and early 1990s, the Brazilian process of capital accumulation through ground-rent recovery underwent a structural crisis and would begin to reproduce itself under new politico-economic forms—namely, a limited or neoliberal ISI process. As part of that transformation, steel SOEs were privatised or shut down. They would no longer mediate the appropriation of ground-rent by industrial capital.

The 1990–1992 privatisation process gave way to the partial consolidation of the steel industry and, consequently, the rationalisation of employment practices and the upgrading of productive facilities (Amann and Nixon 1999: 76–8; de Andrade and da Silva Cunha 2003: 16). Labour productivity strongly increased, yet remained well below world-market norms, as most plants continued producing on a suboptimal scale and technological level. Hence, while through the mid-1990s the Brazilian steel industry became a global low-cost producer of low technology-intensive hot-rolled steel, its international competitiveness was based on the low local cost of iron ore, energy, and labour-power, and the relatively lax local environmental regulations (Amann and Nixon 1999: 69–79; McKinsey 1998: 28).

Moreover, despite early gains in international competitiveness, throughout the 1990s the Brazilian steel industry became, once more, increasingly oriented to the domestic market. As the decade progressed, exports fell below 30 per cent of total output, and became concentrated in semi-finished products, like slabs produced by CST and Açominas, and/or directed to protected regional markets (Instituto Brasileiro de Siderurgia 1995, 2000). The increasingly high overvaluation of the national currency, together with the high cost of local transport and port facilities, hurt the profitability of exported goods, other than raw or semi-processed materials (Mendes de Paula 1993: 52–3; McKinsey 1998: 13, 27, 34). In the steel industry, exports of high value-added products were only possible because of tax credits and subsidised loans made through the BNDE's modernisation fund for equipment acquisitions, which compensated for the negative impact of exchange-rate overvaluation on local costs other than raw materials (Amann and Nixon 1999: 81; Amarante de Andrade and da Silva Cunha 2003: 14–6). Exchange-rate overvaluation, nevertheless, reduced the domestic price of iron ore and imported equipment, largely possible after the 1990–1994 trade-opening reforms, and thus

allowed, now privately-owned, steel producers to appropriate ground-rent when selling their output in the domestic market.

Unsurprisingly, the sector's profitability improved significantly in the post-privatisation period. First, employment in the steel industry was reduced by as much as 37.6 per cent during the 1989–1994 privatisation process and subsequent adjustment. Secondly, steel SOEs were purchased at prices far below the real value of their assets (Amann et al. 2004: 15, 31). In 1995, the return on capital invested in Brazilian steel producers was 3.6 per cent, 10.2 per cent and 23.4 per cent when calculated at, respectively, 'replacement cost', 'current market value' and 'privatisation values' (McKinsey 1998: 29).

After the 1999–2002 global and local economy slowdown, the Brazilian steel industry went through another process of consolidation, which included the entrance of major global leaders, like ArcelorMittal that bought CST and other smaller plants, and the fusion of domestically owned firms (for example, the consolidation of the Gerdau Group to take over Açominas, among others). This process resulted in significant investments in technological upgrading and the expansion of production capacities, both heavily supported by BNDE subsidised loans (Amarante de Andrade and da Silva Cunha 2003: 17–20). Yet despite these developments, no integrated mill in Brazil managed to achieve world-market scales of operation and, arguably, technological/environmental standards. Furthermore, the post-2004 increasing exchange-rate overvaluation—the general form of ground-rent transfer to industrial capital—significantly hurt export growth, notably of high value-added products, maintaining structural limitations on the expansion of the market and therefore on the introduction of vanguard technology (McKinsey and Co. 2013: 15). In 2008, Brazil's indirect trade in steel became negative for the first time since the mid-1970s, while locally owned firms took advantage of the strong exchange rate overvaluation to invest in facilities in industrially advanced countries (World Steel Association 2013).

In sum, before they were privatised in the early 1990s, steel SOEs, controlling almost all integrated facilities and the manufacture of flat products, played a central role in the promotion of the ISI process (that is, in the accumulation of capital through ground-rent recovery). They supplied steel products to their clients at subsidised values, purchased equipment and machinery from domestic producers at inflated prices, and employed an overextended workforce. The resources used to provide these subsidies originated not only in the profits of these companies but also in the

ground-rent appropriated, and the foreign capital borrowed, by the state. In the post-privatisation period, steel companies no longer channelled a portion of the agrarian rent and external credits to their suppliers and clients. They continued, however, to mediate the appropriation of the rent materialised in the price of iron ore and hydroelectricity to steel producers and consumers (that is industrial capital, notably the automobile and white-goods sectors). Moreover, capitals invested in integrated steel mills themselves began, along with any other private capital in Brazil, to participate in the appropriation of local ground-rent and its complementary sources of extraordinary social wealth.

THE KOREAN STEEL INDUSTRY

In the mid-1960s, the Korean steel industry was practically non-existent. Private domestically owned firms, utilising obsolete facilities and a large amount of imported pig iron and scrap steel, satisfied around one-third of a limited domestic demand. Despite the ambitions of the Korean military government, there was not a single large-scale integrated mill, let alone an internationally efficient plant or quality steel producer. There were already three in Brazil at that time (Amsden 1989: 295; Cohen 1978: 422; D'Costa 1994: 52; Fisher et al. 1988: 168; Hogan 2001: 39).

The shape of the Korean steel industry, however, would soon change dramatically. In an import-substitution effort, and against the advice of foreign governments and international development agencies, the Korean state began to plan for the construction of a large-scale fully-integrated steel mill. This was allegedly necessary to help develop a 'balanced' industrial base, including the military industry needed to protect the nation from the security threat permanently posed by North Korea, and crucially after the change in US security policy on East Asia (Amsden 1989: 295; Clifford 1998: 67–71; Haggard 1994: 33–4).

In late-1960s Korea, however, such an enterprise was not a straightforward project. To begin with, it was a project that required an amount of capital that no local private company could then hope to raise. And, even if this were otherwise, the local private sector was unwilling to risk resources in an industry that, given its importance for the process of industrialisation and national defence, could easily fall under strong government regulations (Park 2003: 67–8). Moreover, despite the government's efforts, foreign companies were not prepared to undertake such a supposedly unviable project (D'Costa 1994: 56; Hogan 2001: 3–10).

As in most other 'developing' countries, and many 'developed' ones, the state as the political representative of Korean social capital therefore took charge of the project and, in 1968, created POSCO (Pohang Iron and Steel Company) using its own and externally borrowed resources (including funds from Japanese war reparations). Later on, the company received a strong boost as part of the 1973 Heavy and Chemical Industries Plan. POSCO has since been the main Korean producer of high value-added flat products and, until recently, the only one with integrated facilities. All privately-owned mills have used electric-arc furnaces to finish the raw steel mainly bought from POSCO (D'Costa 1999b: 84).

The construction of POSCO's first plant in the deep-water, southeast coastal city of Pohang was completed in five stages between 1970 and 1984. For this project, POSCO contracted most technology and technical assistance from global market leader Japan's Nippon Steel, though it also sourced key parts of its equipment in Europe. The low cost of the local labour-force and the militaristic discipline used in the process maintained construction costs at internationally low levels (Amsden 1989: 297; Auty 1991: 19–20; D'Costa 1994: 58–60; Hogan 2001: 15–25). In contrast to the Brazilian experience, POSCO has always sought to purchase its fixed capital at the lowest prices possible, regardless of national origin. Production capacity in 1985, when POSCO's first plant was finally completed, reached 9.6 million tons per year, well above the theoretical minimum efficient scale of 3.5 and almost equal to the average of the Japanese industry (Barnett and Schorsch 1983: 57–9). During the first stages of its history, POSCO concentrated on the production of heavy plates and hot-rolled coils used in the rapidly expanding shipbuilding, automobile, and machinery industries. More skill-intensive products, like cold-rolled coils and specialty steels, were relatively unimportant in the initial stages of POSCO's development (Park 1997: 14–16).

POSCO's fast ascent has strengthened those scholarly positions which point at state institutions as the main factor accounting for Korea's late-industrialisation (see, for example, Amsden 1989; Kohli 2004). This, however, is only a superficial part of the story. Often forgotten in those analyses is the fact that during the 1970s and 1980s the steel industry was being affected by the continual introduction of skill-replacing technical changes,⁹ and that Korea had access to a low-cost, highly-disciplined and easily-trainable workforce—crucially after a two-year long compulsory military instruction for male workers and extended state repressive activities and indoctrination campaigns (Bello and Rosenfeld 1992; Grievies and

Saul 1986: Chap. 2). Moreover, existing labour market institutions, such as the extended use of subcontracting and null or weak trade-union representation, have been particularly propitious in reproducing a workforce with the combination of productive attributes and cost required by capital in the industry (D’Costa 1994: 68–9, 1999b: 105–6).

By the early 1980s, with the completion of the third expansion stage, the company was successfully competing with Japanese integrated mills, the contemporary lowest-cost producers, in world markets for finished steel—at least in non-specialty products (Auty 1991: 20). In sharp contrast to the Brazilian experience, during the 1970s and 1980s POSCO sold about half its output in the world market and most of the remainder to local, export-oriented sectors, such as the shipbuilding, machine-tools, and automobile industries (Hogan 2001: 37–61). Through the sale of steel to local consumers at subsidised prices, POSCO transferred a portion of its profits to these privately-owned downstream industries, helping them to strengthen their international competitiveness (Auty 1991: 24; D’Costa 1994: 69–70, 1999b: 87; Park 2003: 55). Hence, the alleged private-style management of this SOE cannot be held up as the reason behind its long-term commercial success, as argued elsewhere (see, for example, D’Costa 1994; Park 2003: 68–9). Nor can it be the quality of state institutions—the largely state-owned Korea Aluminium Company, for instance, was unable to replicate POSCO’s success (Stern et al. 1995: 140–2).

Skill-replacing technological developments resulted in changes in the international competitiveness of capitals located in different countries, and hence in the international division of labour in steel production. As can be observed in Table 9.2, in the mid-1980s POSCO’s operational costs for hot-rolled coils were lower than the average Japanese producer and roughly the same as those of a state-of-the-art Japanese plant. POSCO compensated for the lower productivity of its workforce, which was largely

Table 9.2 Cost of producing hot-rolled coil (USD per ton of finished product in 1985)

	<i>Japan</i>	<i>Korea</i>
Major raw materials	94	84
Labour costs	41	18
Non-major raw materials	54	47
Total operating costs	189	149

Note: administrative and financial costs not included

Source: Data from Grievess and Saul (1986)

attributable to its relative inexperience and the less efficient technology used for casting processes, with lower wages (see Table 9.1). Japanese leading firms retained, at least for a period, a marginal cost advantage in the more technology-intensive cold-rolled coil production. POSCO's competition eroded some of Japanese firms' external markets, contributing to their excess capacity, as had happened a decade earlier to US mills when Japanese capital appeared in the global market for steel. This further increased their total average production costs, undermining their long-running international competitiveness. While POSCO attained 99 per cent capacity utilisation during the mid-1980s, the largest Japanese steel companies averaged only 52 per cent (Park 1997: 14).

These transformations in the global steel industry manifested themselves in differences in the valorisation and growth capacities of capitals invested in large-scale integrated mills in both countries. While the rate of profit for an average steel mill in 1985 Japan was about 8.45 per cent, POSCO's pre-tax profit rate would have been around 20 per cent had it not sold part of its output in the domestic market at substantially subsidised prices. Conversely, the pre-tax rate of return on capital advanced for valorisation for a representative Japanese steel mill that year would have been around 26 per cent had they worked at full capacity and thus spread fixed costs more thinly. More importantly, POSCO's rate of profit (at export rather than domestic market prices) in 1985 would have been around -2.3 per cent had it paid Japanese wages to its relatively low-productivity production workers.

As can be observed in Table 9.1 the slight advantage enjoyed by Japan's most efficient steel mills disappeared throughout the second half of the 1980s, when POSCO installed its third continuous caster at the Pohang works, thereby attaining a 100 per cent continuous casting process, when it also built its state-of-the-art, fully automated and computerised plant in the southern coastal town of Gwangyang (Hogan 2001: 25-35; Park 2003: 61-2). Nevertheless, despite becoming one of the largest and most efficient steelmaking companies in the world, POSCO has not been at the forefront of technological developments in the sector. Rather, the company has concentrated on the introduction of incremental rather than radical innovations (Hogan 2001: 63-73; Park 2003: 56-60).

During the 1990s POSCO consolidated its world leadership and managed to out-compete the most efficient Japanese producers in almost every sector of the market (see Table 9.1 for the case of cold-rolled coils). As the new technological base was consolidated and worker experience matured,

labour productivity in Korea as good as reached Japanese levels, while wages remained substantially lower (Park 1997: 14). Moreover, even after the revival of the US steel industry led by the mini-mill sector, POSCO could, unlike most of its Japanese counterparts, continue to compete successfully in world markets for non-speciality steel (Park 2003: 53–4). The company's rate of profit, when output is valued at world market prices, remained at around 25 per cent in 1995 despite the emergence of a new global steel crisis.

With POSCO's global leadership consolidated, the Korean state initiated its divestment from the company as part of an economy-wide liberalisation programme. The firm had by then already attained an efficient scale of operation and had become one of the world's largest and lowest-cost steel producers. Moreover, downstream industries were no longer in need of heavily subsidised steel products as they had also substantially improved their international competitiveness. On both sides, there was no longer a need for public ownership of the company. Yet, POSCO's sale was, unlike that of its Brazilian counterparts, a slow process; it only ended in 2001, when the state sold its remaining 20 per cent to 25 per cent of the company's equity. By the mid-2000s at least two thirds of the company's shares were owned by foreign investors (D'Costa 1999b: 101; Hogan 2001: 16).

Although POSCO's cost competitiveness in global markets remained strong during its post-1998, privately run era, it has not been as comfortable as before. As wages in South Korea increased, while local workforce skills expanded further, the cost gap with producers in both higher-wage/productivity and lower-wage/productivity countries narrowed. As Table 9.1 shows, in 2003 operational costs for the production of cold-rolled coils at parity exchange rates—that is, discounting the post-crisis undervaluation of the Korean currency—were still lower than in industrially advanced countries but already higher than in China where, nevertheless, steel products are arguably of a lower quality. This, however, might be misleading because the Chinese *yuan* was also widely considered to have been strongly undervalued (Grinberg 2014). At market exchange rates, POSCO's operational costs were still lower than Chinese costs.

In sum, the emergence and long-term development of the South Korean steel industry was not simply a product of bold state policies, as is often argued. Rather, it resulted from the development of the autonomously regulated process of capital accumulation on a global scale, whose contradictory motion has been necessarily *mediated* by the actions of the Korean state. In effect, the Korean state's long-term efforts in the promotion of

the sector only began to pay-off after the mid-1970s, when the development of the NIDL created the conditions for capital to take advantage of the large availability in Korea of relatively cheap, highly disciplined, and easily trainable labour-power. More specifically, automated and computerised technologies had by then significantly simplified production processes and thus made possible the use of relatively low-skilled workforces. Before the mid-1970s state policies had been as ineffective in building an internationally competitive steel industry as in many other developing countries.

CONCLUSION

This chapter has compared the processes of 'state-led' industrialisation in Brazil and South Korea. It claimed that the specific form of participation of each economy in the production of relative surplus-value on a global scale has determined the pattern of industrialisation that followed and the political processes through which it came about. In Brazil industrial capital accumulated through the state mediated recovery of ground-rent, which implied small-scale production for protected domestic markets. By contrast, in South Korea, industrial capital accumulated through the exploitation of a *relatively* cheap and disciplined workforce performing simplified activities for world market production in increasingly complex sectors. These claims were substantiated with the analysis of the differentiated development of these countries' steel industries.

NOTES

1. This section draws upon on Iñigo Carrera (2013), Grinberg and Starosta (2009, 2014), and Grinberg (2013b).
2. Ground-rent is surplus-value appropriated by landowners due to their differential and absolute *monopoly* over uncontrollable natural conditions of production that, respectively, increase labour productivity or make production possible (Marx 1981: 779–823).
3. The structure of the process of capital accumulation in Mexico and Central America was transformed in the 1980s as a result of the same economic forces that accounted for the emergence of East Asia as a global industrial powerhouse (Grinberg 2010).
4. This section is based upon Grinberg (2016).
5. As in the industrially advanced economies, neoliberalism has also been the politico-economic form through which capital realised the differentiation of the conditions of reproduction of the different portions of the workforce

- according to their, increasingly distinctive, productive attributes (Iñigo Carrera 2013).
6. This section is based on Grinberg (2013b and 2016).
 7. The following two sections draw upon Grinberg (2011: 115–33).
 8. See Iñigo Carrera (1996) for the theoretical and methodological foundations of the model used to measure the profitability of individual industrial capitals; and Grinberg (2011: 181–3) for the sources used to pursue the computations of representative capitals in the Brazilian and Korean steel industries.
 9. Skill-replacing technical changes in the steel industry centred, initially, on the computerisation of the control of the physicochemical processes required to transform raw materials into final products and, subsequently, on the automation of the regulation and interconnection of such processes (Balconi 2002; Coriat 1992; Hasegawa 1996).

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